

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: P642987

Luminaire Tested: ML5615LSNFL259FS1E - 693WB - 1200LM - 3000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P642987  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSNFL259FS1E - 693WB - 1200LM - 3000K  
Description: ML56 RR, 25D TIR OPTIC, 6" WHITE BAFFLE TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1388.0 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

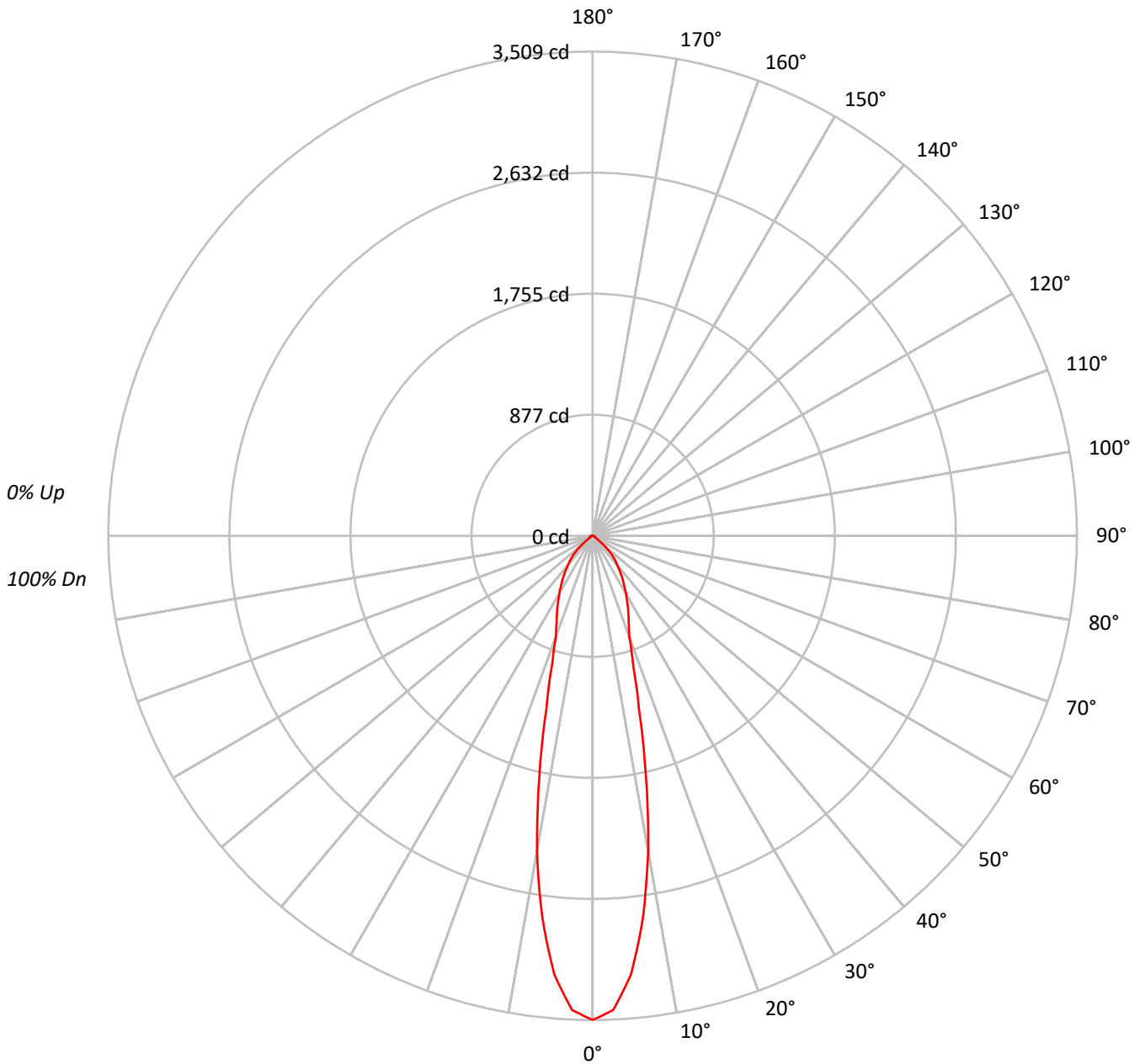
Input Watts (W): 13.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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   | 113 | 110 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 101 | 99  | 98  | 97  | 96  | 95  | 93  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 108 | 103 | 99  | 95  | 105 | 101 | 97  | 94  | 98  | 95  | 92  | 95  | 92  | 90  | 92  | 90  | 88  | 86  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 102 | 96  | 91  | 87  | 100 | 94  | 90  | 86  | 92  | 88  | 85  | 89  | 86  | 83  | 87  | 84  | 82  | 80  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 97  | 90  | 84  | 80  | 95  | 88  | 83  | 79  | 86  | 82  | 78  | 84  | 81  | 77  | 82  | 79  | 77  | 75  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 92  | 84  | 78  | 74  | 91  | 83  | 78  | 74  | 81  | 77  | 73  | 80  | 76  | 72  | 78  | 75  | 72  | 70  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 88  | 79  | 73  | 69  | 87  | 79  | 73  | 69  | 77  | 72  | 68  | 76  | 71  | 68  | 74  | 71  | 68  | 66  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 84  | 75  | 69  | 65  | 83  | 74  | 69  | 65  | 73  | 68  | 64  | 72  | 67  | 64  | 71  | 67  | 64  | 62  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 80  | 71  | 65  | 61  | 79  | 71  | 65  | 61  | 70  | 65  | 61  | 68  | 64  | 61  | 68  | 63  | 60  | 59  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 77  | 68  | 62  | 58  | 76  | 67  | 62  | 58  | 66  | 61  | 58  | 65  | 61  | 58  | 65  | 60  | 57  | 56  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 74  | 65  | 59  | 55  | 73  | 64  | 59  | 55  | 63  | 58  | 55  | 63  | 58  | 55  | 62  | 58  | 55  | 53  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 192353 |
| 5°  | 175550 |
| 10° | 129056 |
| 15° | 73542  |
| 20° | 45311  |
| 25° | 36988  |
| 30° | 30473  |
| 35° | 24989  |
| 40° | 20016  |
| 45° | 15738  |
| 50° | 8989   |
| 55° | 3230   |
| 60° | 2708   |
| 65° | 2361   |
| 70° | 2084   |
| 75° | 2203   |
| 80° | 2462   |
| 85° | 2453   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15738 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 276.1  | 19.9      |
| 10°-20°   | 373.7  | 26.9      |
| 20°-30°   | 281.5  | 20.3      |
| 30°-40°   | 233.6  | 16.8      |
| 40°-50°   | 150.5  | 10.8      |
| 50°-60°   | 39.9   | 2.9       |
| 60°-70°   | 17.8   | 1.3       |
| 70°-80°   | 11.0   | 0.8       |
| 80°-90°   | 3.9    | 0.3       |
| 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°    | 931.2  | 67.1      |
| 0°-40°    | 1164.8 | 83.9      |
| 0°-60°    | 1355.3 | 97.6      |
| 0°-90°    | 1388.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1388.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 3509 |      |
| 5°  | 3190 | 276  |
| 15° | 1296 | 374  |
| 25° | 612  | 281  |
| 35° | 373  | 234  |
| 45° | 203  | 151  |
| 55° | 34   | 40   |
| 65° | 18   | 18   |
| 75° | 10   | 11   |
| 85° | 4    | 4    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 3508.8 |
| 2.5°  | 3439.9 |
| 5°    | 3190.1 |
| 7.5°  | 2793.3 |
| 10°   | 2318.4 |
| 12.5° | 1781.1 |
| 15°   | 1295.8 |
| 17.5° | 969.3  |
| 20°   | 776.7  |
| 22.5° | 681.7  |
| 25°   | 611.5  |
| 27.5° | 543.8  |
| 30°   | 481.4  |
| 32.5° | 425.4  |
| 35°   | 373.4  |
| 37.5° | 324.0  |
| 40°   | 279.7  |
| 42.5° | 240.7  |
| 45°   | 203.0  |
| 47.5° | 150.9  |
| 50°   | 105.4  |
| 52.5° | 54.6   |
| 55°   | 33.8   |
| 57.5° | 27.3   |
| 60°   | 24.7   |
| 62.5° | 20.8   |
| 65°   | 18.2   |
| 67.5° | 14.3   |
| 70°   | 13.0   |
| 72.5° | 11.7   |
| 75°   | 10.4   |
| 77.5° | 9.1    |
| 80°   | 7.8    |
| 82.5° | 5.2    |
| 85°   | 3.9    |
| 87.5° | 1.3    |
| 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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— 0°-180°

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Scaled Data Report



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