

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: P643353

Luminaire Tested: ML5615LSVWFL759FS1E - 694TBZB - 1500LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643353  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-91)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSVWFL759FS1E - 694TBZB - 1500LM - 3500K  
Description: ML56 RR, 75D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1803.8 lumens  
Efficiency: N/A  
Efficacy: 105.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.08  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

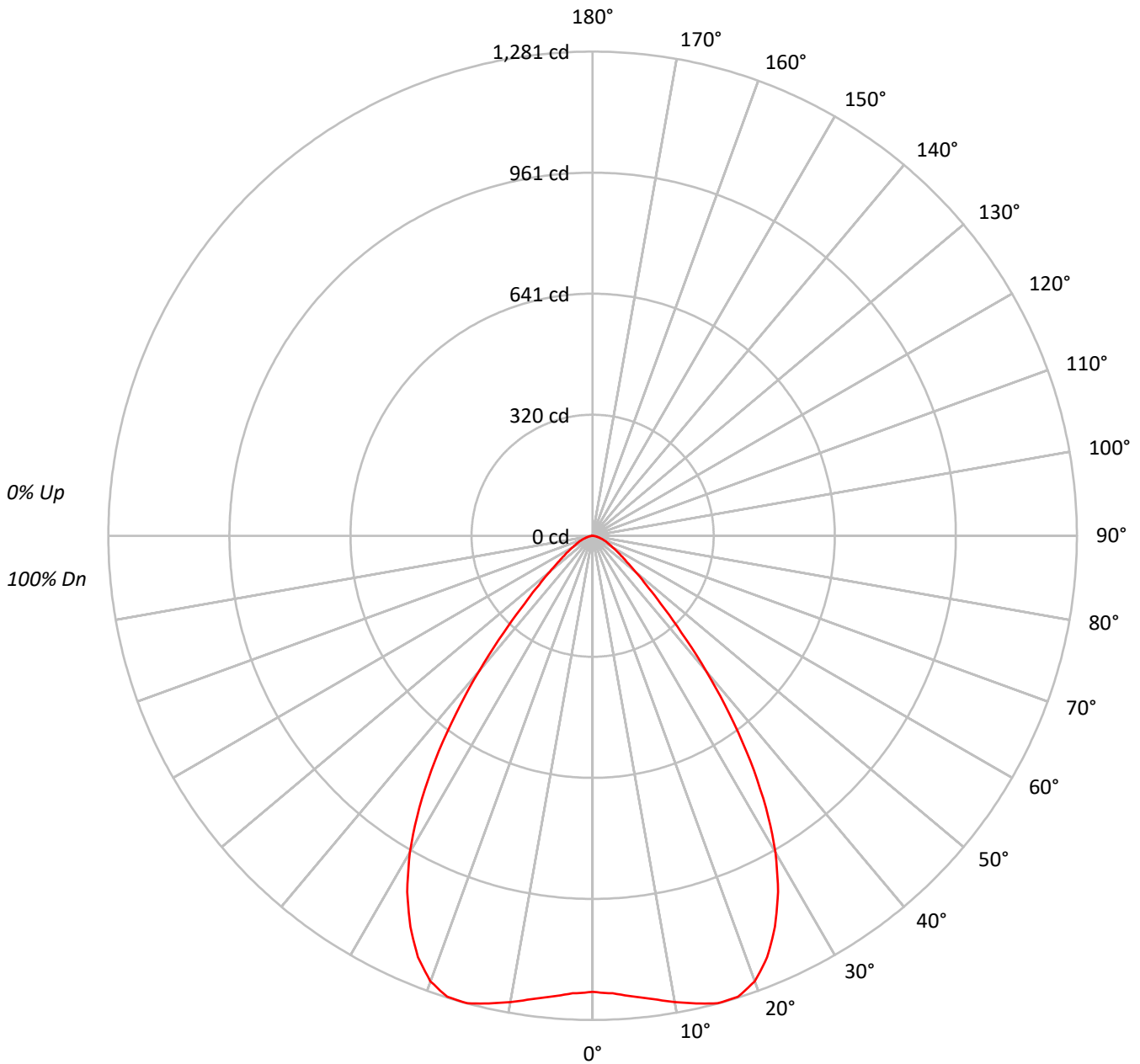
Input Watts (W): 17.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|
| RF  | 20  |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |     |     |     | 20 |    |    |    |    |    |    |    |    | 20 |    |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| 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 | 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 | 104 | 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  | 87  | 85  | 83  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| 3   | 99  | 92  | 86  | 81  | 97  | 90  | 85  | 81  | 88  | 83  | 79  | 85  | 81  | 78  | 83  | 80  | 77  | 75  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| 4   | 93  | 84  | 78  | 73  | 91  | 83  | 77  | 73  | 81  | 76  | 72  | 79  | 74  | 71  | 77  | 73  | 70  | 68  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| 5   | 88  | 78  | 71  | 66  | 86  | 77  | 71  | 66  | 75  | 69  | 65  | 73  | 68  | 65  | 72  | 67  | 64  | 62  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| 6   | 82  | 72  | 65  | 60  | 81  | 71  | 65  | 60  | 70  | 64  | 60  | 68  | 63  | 59  | 67  | 62  | 59  | 57  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| 7   | 78  | 67  | 60  | 55  | 76  | 66  | 60  | 55  | 65  | 59  | 55  | 64  | 58  | 54  | 62  | 58  | 54  | 52  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| 8   | 73  | 62  | 55  | 51  | 72  | 62  | 55  | 51  | 61  | 55  | 50  | 59  | 54  | 50  | 58  | 54  | 50  | 48  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| 9   | 69  | 58  | 51  | 47  | 68  | 58  | 51  | 47  | 57  | 51  | 47  | 56  | 50  | 46  | 55  | 50  | 46  | 45  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| 10  | 65  | 54  | 48  | 44  | 64  | 54  | 48  | 43  | 53  | 47  | 43  | 52  | 47  | 43  | 51  | 47  | 43  | 42  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 66157 |
| 5°  | 67318 |
| 10° | 69738 |
| 15° | 72685 |
| 20° | 73186 |
| 25° | 69028 |
| 30° | 61218 |
| 35° | 48680 |
| 40° | 33370 |
| 45° | 19731 |
| 50° | 12605 |
| 55° | 8783  |
| 60° | 6666  |
| 65° | 5539  |
| 70° | 4472  |
| 75° | 3474  |
| 80° | 2084  |
| 85° | 1006  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 19731 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 117.7  | 6.5       |
| 10°-20°   | 360.2  | 20.0      |
| 20°-30°   | 519.3  | 28.8      |
| 30°-40°   | 448.0  | 24.8      |
| 40°-50°   | 210.0  | 11.6      |
| 50°-60°   | 86.0   | 4.8       |
| 60°-70°   | 43.0   | 2.4       |
| 70°-80°   | 17.5   | 1.0       |
| 80°-90°   | 2.2    | 0.1       |
| 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°    | 997.2  | 55.3      |
| 0°-40°    | 1445.2 | 80.1      |
| 0°-60°    | 1741.1 | 96.5      |
| 0°-90°    | 1803.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1803.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1207 |      |
| 5°  | 1223 | 118  |
| 15° | 1281 | 360  |
| 25° | 1141 | 519  |
| 35° | 727  | 448  |
| 45° | 254  | 210  |
| 55° | 92   | 86   |
| 65° | 43   | 43   |
| 75° | 16   | 17   |
| 85° | 2    | 2    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 1206.8 |
| 2.5°  | 1211.8 |
| 5°    | 1223.3 |
| 7.5°  | 1236.4 |
| 10°   | 1252.8 |
| 12.5° | 1267.6 |
| 15°   | 1280.7 |
| 17.5° | 1279.1 |
| 20°   | 1254.5 |
| 22.5° | 1206.8 |
| 25°   | 1141.2 |
| 27.5° | 1062.3 |
| 30°   | 967.1  |
| 32.5° | 853.8  |
| 35°   | 727.4  |
| 37.5° | 594.4  |
| 40°   | 466.3  |
| 42.5° | 348.1  |
| 45°   | 254.5  |
| 47.5° | 192.1  |
| 50°   | 147.8  |
| 52.5° | 114.9  |
| 55°   | 91.9   |
| 57.5° | 75.5   |
| 60°   | 60.8   |
| 62.5° | 50.9   |
| 65°   | 42.7   |
| 67.5° | 36.1   |
| 70°   | 27.9   |
| 72.5° | 21.3   |
| 75°   | 16.4   |
| 77.5° | 11.5   |
| 80°   | 6.6    |
| 82.5° | 3.3    |
| 85°   | 1.6    |
| 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





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Scaled Data Report



— 0°-180°

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Scaled Data Report



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