

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: P641596

Luminaire Tested: ML5612LSVWFL97FS1E - 592H - 600LM - 2700K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641596  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-95)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSVWFL97FS1E - 592H - 600LM - 2700K  
Description: ML56 RR, MILKY OPTIC, 5" HAZE TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: -

**Summary**

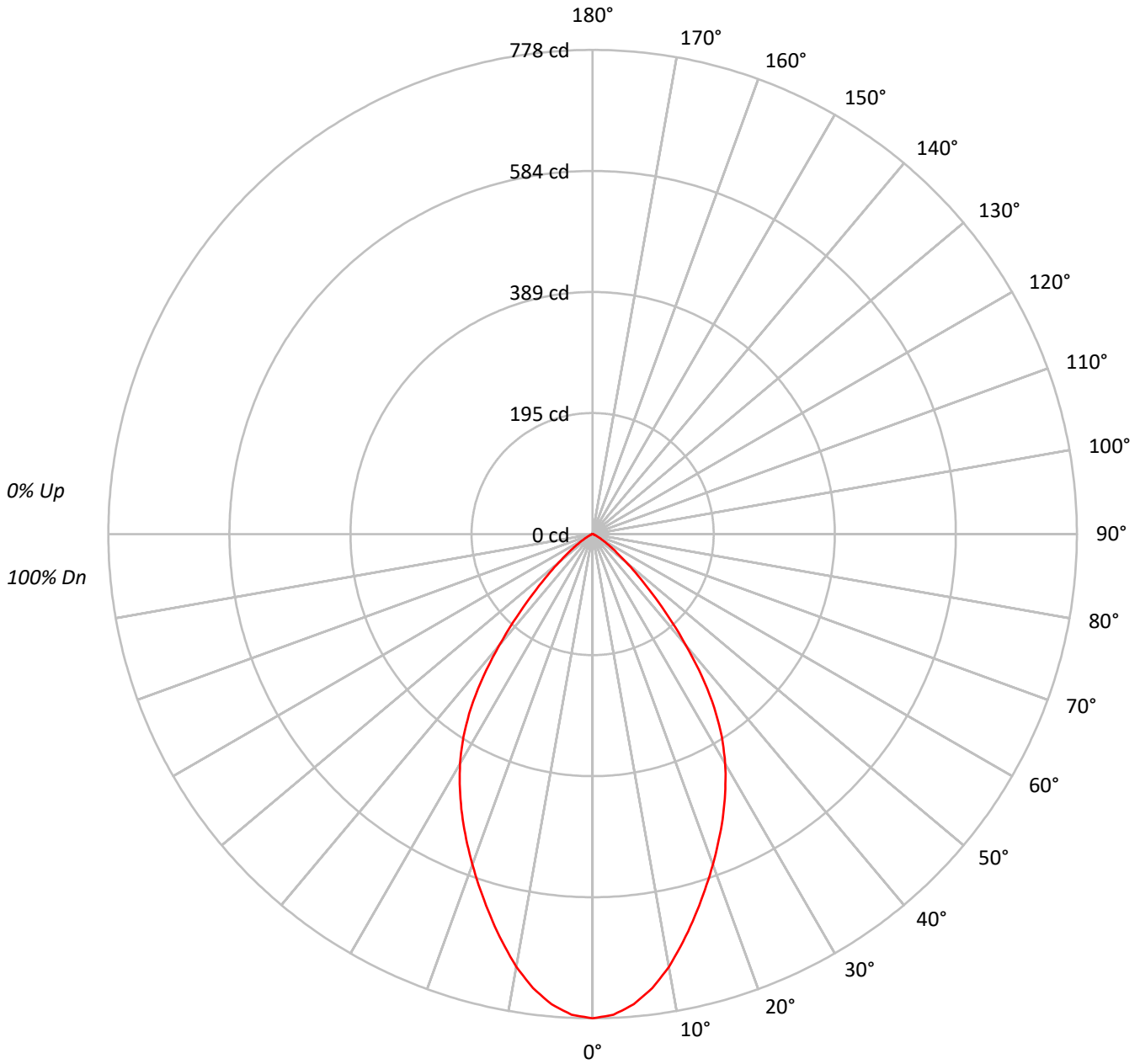
Lumens per Lamp: N/A  
Luminaire Lumens: 833.8 lumens  
Efficiency: N/A  
Efficacy: 81.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.97  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 10.3  
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 |    |    |   | 100 |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 113 | 110 | 107 | 105 | 110 | 108 | 105 | 103 | 104 | 102 | 100 | 100 | 98  | 97  | 96  | 95  | 94  | 92  |    |    |   | 92  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 107 | 101 | 97  | 93  | 104 | 99  | 95  | 92  | 96  | 93  | 90  | 93  | 90  | 88  | 90  | 88  | 86  | 84  |    |    |   | 84  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 100 | 93  | 88  | 83  | 98  | 92  | 87  | 83  | 89  | 85  | 81  | 87  | 83  | 80  | 84  | 81  | 79  | 77  |    |    |   | 77  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 95  | 86  | 80  | 75  | 93  | 85  | 79  | 75  | 83  | 78  | 74  | 81  | 76  | 73  | 79  | 75  | 72  | 71  |    |    |   | 71  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 89  | 80  | 73  | 68  | 87  | 79  | 73  | 68  | 77  | 72  | 68  | 75  | 71  | 67  | 74  | 70  | 66  | 65  |    |    |   | 65  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 84  | 74  | 67  | 63  | 82  | 73  | 67  | 62  | 72  | 66  | 62  | 70  | 65  | 62  | 69  | 64  | 61  | 60  |    |    |   | 60  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 79  | 69  | 62  | 58  | 78  | 68  | 62  | 57  | 67  | 61  | 57  | 66  | 61  | 57  | 64  | 60  | 56  | 55  |    |    |   | 55  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 75  | 64  | 58  | 53  | 73  | 64  | 57  | 53  | 63  | 57  | 53  | 61  | 56  | 53  | 60  | 56  | 52  | 51  |    |    |   | 51  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 71  | 60  | 54  | 49  | 70  | 60  | 53  | 49  | 59  | 53  | 49  | 58  | 53  | 49  | 57  | 52  | 49  | 47  |    |    |   | 47  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 67  | 56  | 50  | 46  | 66  | 56  | 50  | 46  | 55  | 50  | 46  | 54  | 49  | 46  | 54  | 49  | 45  | 44  |    |    |   | 44  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 61424 |
| 5°  | 60105 |
| 10° | 56576 |
| 15° | 51912 |
| 20° | 47439 |
| 25° | 43255 |
| 30° | 38831 |
| 35° | 32862 |
| 40° | 24011 |
| 45° | 15004 |
| 50° | 8560  |
| 55° | 4679  |
| 60° | 2416  |
| 65° | 1121  |
| 70° | 600   |
| 75° | 275   |
| 80° | 409   |
| 85° | 0     |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15004 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 70.7   | 8.5       |
| 10°-20°   | 178.0  | 21.4      |
| 20°-30°   | 227.7  | 27.3      |
| 30°-40°   | 208.8  | 25.0      |
| 40°-50°   | 107.4  | 12.9      |
| 50°-60°   | 32.7   | 3.9       |
| 60°-70°   | 6.8    | 0.8       |
| 70°-80°   | 1.4    | 0.2       |
| 80°-90°   | 0.1    | 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°    | 476.5  | 57.1      |
| 0°-40°    | 685.3  | 82.2      |
| 0°-60°    | 825.5  | 99.0      |
| 0°-90°    | 833.8  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 833.8  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 778 |      |
| 5°  | 758 | 71   |
| 15° | 635 | 178  |
| 25° | 497 | 228  |
| 35° | 341 | 209  |
| 45° | 134 | 107  |
| 55° | 34  | 33   |
| 65° | 6   | 7    |
| 75° | 1   | 1    |
| 85° | 0   | 0    |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 778.1 |
| 2.5°  | 773.0 |
| 5°    | 758.5 |
| 7.5°  | 735.6 |
| 10°   | 705.8 |
| 12.5° | 671.0 |
| 15°   | 635.2 |
| 17.5° | 599.5 |
| 20°   | 564.7 |
| 22.5° | 530.6 |
| 25°   | 496.6 |
| 27.5° | 461.8 |
| 30°   | 426.0 |
| 32.5° | 386.1 |
| 35°   | 341.0 |
| 37.5° | 288.3 |
| 40°   | 233.0 |
| 42.5° | 180.3 |
| 45°   | 134.4 |
| 47.5° | 97.8  |
| 50°   | 69.7  |
| 52.5° | 48.5  |
| 55°   | 34.0  |
| 57.5° | 23.0  |
| 60°   | 15.3  |
| 62.5° | 9.4   |
| 65°   | 6.0   |
| 67.5° | 3.4   |
| 70°   | 2.6   |
| 72.5° | 1.7   |
| 75°   | 0.9   |
| 77.5° | 0.9   |
| 80°   | 0.9   |
| 82.5° | 0.0   |
| 85°   | 0.0   |
| 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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Scaled Data Report



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