

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: P643513

Luminaire Tested: ML5615LSVWFL9FS1E - 594SNB - 1200LM - 3500K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P643513  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-102)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5615LSVWFL9FS1E - 594SNB - 1200LM - 3500K  
Description: ML56 RR, MILKY OPTIC, 5" SATIN NICKLE GIMBAL TRIM  
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

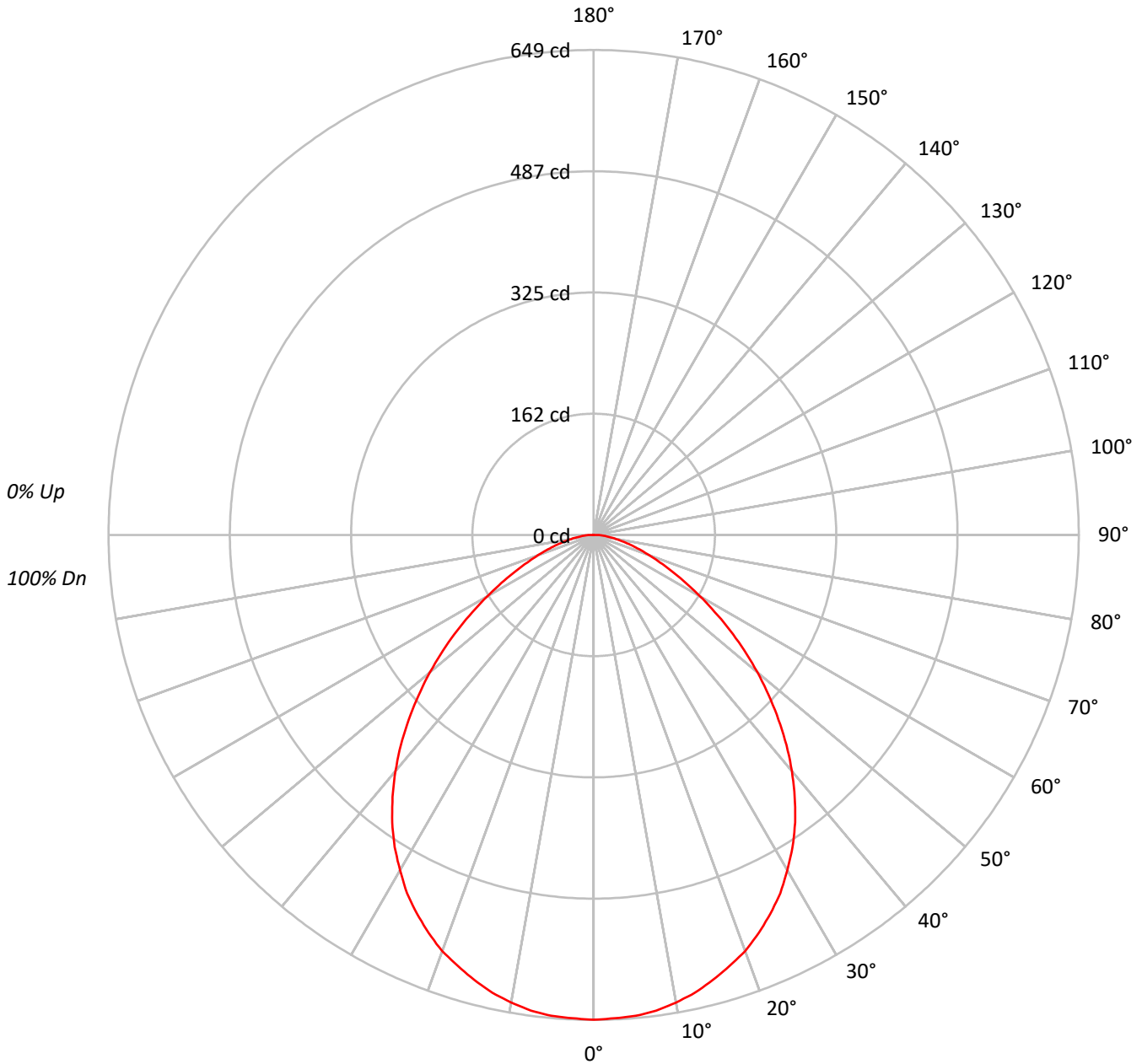
Lumens per Lamp: N/A  
Luminaire Lumens: 1441.8 lumens  
Efficiency: N/A  
Efficacy: 107.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.26  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

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 |  |  |  |  |  |  |  |  |   |
| 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   | 110 | 106 | 102 | 99  | 108 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 89  | 87  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 101 | 94  | 88  | 83  | 99  | 92  | 87  | 82  | 89  | 84  | 80  | 85  | 82  | 78  | 83  | 79  | 76  | 74  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 93  | 84  | 76  | 70  | 91  | 82  | 75  | 70  | 79  | 73  | 69  | 77  | 72  | 67  | 74  | 70  | 66  | 64  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 66  | 60  | 71  | 65  | 60  | 69  | 63  | 59  | 67  | 62  | 58  | 56  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 80  | 68  | 59  | 53  | 78  | 67  | 59  | 53  | 65  | 58  | 52  | 63  | 57  | 52  | 61  | 56  | 51  | 49  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 74  | 61  | 53  | 47  | 72  | 60  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 56  | 50  | 46  | 44  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 69  | 56  | 48  | 42  | 67  | 55  | 47  | 42  | 54  | 47  | 42  | 52  | 46  | 41  | 51  | 45  | 41  | 39  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 64  | 51  | 43  | 38  | 63  | 51  | 43  | 38  | 49  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 37  | 35  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 60  | 47  | 39  | 34  | 59  | 47  | 39  | 34  | 46  | 39  | 34  | 45  | 38  | 34  | 44  | 38  | 34  | 32  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 56  | 44  | 36  | 31  | 55  | 43  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 41  | 35  | 31  | 29  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 51217 |
| 5°  | 51199 |
| 10° | 50933 |
| 15° | 50400 |
| 20° | 49791 |
| 25° | 48716 |
| 30° | 47217 |
| 35° | 45284 |
| 40° | 42508 |
| 45° | 39051 |
| 50° | 35087 |
| 55° | 30678 |
| 60° | 25924 |
| 65° | 21686 |
| 70° | 18188 |
| 75° | 15464 |
| 80° | 13365 |
| 85° | 13314 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 39051 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 61.3   | 4.3       |
| 10°-20°   | 173.9  | 12.1      |
| 20°-30°   | 257.3  | 17.8      |
| 30°-40°   | 292.8  | 20.3      |
| 40°-50°   | 269.4  | 18.7      |
| 50°-60°   | 199.4  | 13.8      |
| 60°-70°   | 116.7  | 8.1       |
| 70°-80°   | 54.7   | 3.8       |
| 80°-90°   | 16.4   | 1.1       |
| 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°    | 492.5  | 34.2      |
| 0°-40°    | 785.3  | 54.5      |
| 0°-60°    | 1254.1 | 87.0      |
| 0°-90°    | 1441.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1441.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 649 |      |
| 5°  | 646 | 61   |
| 15° | 617 | 174  |
| 25° | 559 | 257  |
| 35° | 470 | 293  |
| 45° | 350 | 269  |
| 55° | 223 | 199  |
| 65° | 116 | 117  |
| 75° | 51  | 55   |
| 85° | 15  | 16   |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 648.8 |
| 2.5°  | 647.4 |
| 5°    | 646.1 |
| 7.5°  | 642.1 |
| 10°   | 635.4 |
| 12.5° | 627.4 |
| 15°   | 616.7 |
| 17.5° | 604.7 |
| 20°   | 592.7 |
| 22.5° | 576.7 |
| 25°   | 559.3 |
| 27.5° | 540.7 |
| 30°   | 518.0 |
| 32.5° | 495.3 |
| 35°   | 469.9 |
| 37.5° | 441.9 |
| 40°   | 412.5 |
| 42.5° | 381.8 |
| 45°   | 349.8 |
| 47.5° | 317.7 |
| 50°   | 285.7 |
| 52.5° | 253.6 |
| 55°   | 222.9 |
| 57.5° | 192.2 |
| 60°   | 164.2 |
| 62.5° | 138.8 |
| 65°   | 116.1 |
| 67.5° | 96.1  |
| 70°   | 78.8  |
| 72.5° | 64.1  |
| 75°   | 50.7  |
| 77.5° | 38.7  |
| 80°   | 29.4  |
| 82.5° | 21.4  |
| 85°   | 14.7  |
| 87.5° | 9.3   |
| 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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Scaled Data Report





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Scaled Data Report



— 0°-180°

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Scaled Data Report



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