

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: P640470

Luminaire Tested: ML5609LSVWFLD2W1E - 693BB - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640470
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-110)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSVWFLD2W1E - 693BB - 900LM - 3000K
Description: ML56 RR, MILKY OPTIC, 6" BLACK BAFFLE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

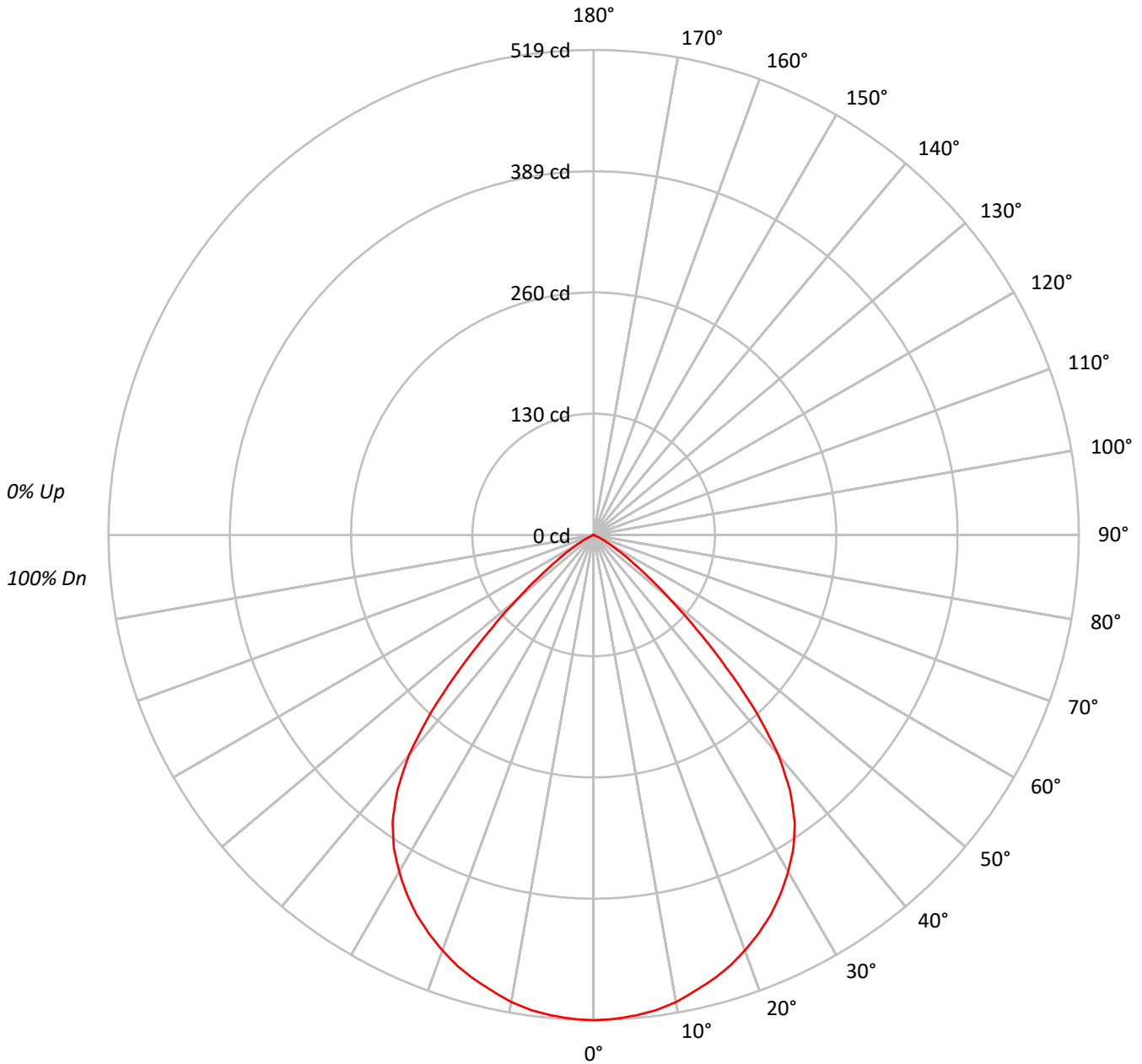
Lumens per Lamp: N/A
Luminaire Lumens: 835.6 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.21
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 11.8
Input Voltage (V): NR
Input Current (A_{in}): 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 | | | |
| 1 | 112 | 109 | 106 | 104 | 110 | 107 | 105 | 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 | 86 | 84 | 83 | | | |
| 3 | 99 | 91 | 85 | 81 | 97 | 90 | 84 | 80 | 87 | 82 | 79 | 84 | 81 | 77 | 82 | 79 | 76 | 74 | | | |
| 4 | 92 | 83 | 77 | 72 | 90 | 82 | 76 | 71 | 80 | 75 | 70 | 78 | 73 | 70 | 76 | 72 | 69 | 67 | | | |
| 5 | 86 | 77 | 70 | 64 | 85 | 76 | 69 | 64 | 74 | 68 | 63 | 72 | 67 | 63 | 70 | 66 | 62 | 61 | | | |
| 6 | 81 | 70 | 63 | 58 | 79 | 70 | 63 | 58 | 68 | 62 | 57 | 66 | 61 | 57 | 65 | 60 | 57 | 55 | | | |
| 7 | 76 | 65 | 58 | 53 | 74 | 64 | 57 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 60 | 55 | 52 | 50 | | | |
| 8 | 71 | 60 | 53 | 48 | 70 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 47 | 46 | | | |
| 9 | 67 | 56 | 49 | 44 | 66 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 43 | 42 | | | |
| 10 | 63 | 52 | 45 | 41 | 62 | 51 | 45 | 40 | 50 | 44 | 40 | 50 | 44 | 40 | 49 | 44 | 40 | 39 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 28474 |
| 5° | 28406 |
| 10° | 28256 |
| 15° | 27951 |
| 20° | 27600 |
| 25° | 27116 |
| 30° | 26333 |
| 35° | 25096 |
| 40° | 21977 |
| 45° | 15544 |
| 50° | 9006 |
| 55° | 4635 |
| 60° | 2127 |
| 65° | 700 |
| 70° | 176 |
| 75° | 233 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15544 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 49.0 | 5.9 |
| 10°-20° | 138.9 | 16.6 |
| 20°-30° | 206.1 | 24.7 |
| 30°-40° | 231.0 | 27.6 |
| 40°-50° | 155.2 | 18.6 |
| 50°-60° | 47.4 | 5.7 |
| 60°-70° | 7.0 | 0.8 |
| 70°-80° | 1.0 | 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° | 394.0 | 47.1 |
| 0°-40° | 625.0 | 74.8 |
| 0°-60° | 827.6 | 99.0 |
| 0°-90° | 835.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 835.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 519 | |
| 5° | 516 | 49 |
| 15° | 492 | 139 |
| 25° | 448 | 206 |
| 35° | 375 | 231 |
| 45° | 200 | 155 |
| 55° | 48 | 47 |
| 65° | 5 | 7 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 519.4 |
| 2.5° | 518.4 |
| 5° | 516.2 |
| 7.5° | 513.0 |
| 10° | 507.6 |
| 12.5° | 500.0 |
| 15° | 492.5 |
| 17.5° | 483.9 |
| 20° | 473.1 |
| 22.5° | 461.3 |
| 25° | 448.3 |
| 27.5° | 433.2 |
| 30° | 416.0 |
| 32.5° | 397.7 |
| 35° | 375.0 |
| 37.5° | 344.9 |
| 40° | 307.1 |
| 42.5° | 257.6 |
| 45° | 200.5 |
| 47.5° | 148.7 |
| 50° | 105.6 |
| 52.5° | 72.2 |
| 55° | 48.5 |
| 57.5° | 31.3 |
| 60° | 19.4 |
| 62.5° | 10.8 |
| 65° | 5.4 |
| 67.5° | 2.2 |
| 70° | 1.1 |
| 72.5° | 1.1 |
| 75° | 1.1 |
| 77.5° | 1.1 |
| 80° | 0.0 |
| 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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— 0°-180°

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