

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: P643578

Luminaire Tested: ML5615LSVWFL9FS1E - 691WB - 1500LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P643578
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-105)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSVWFL9FS1E - 691WB - 1500LM - 3500K
Description: ML56 RR, MILKY OPTIC, 6" DEADFRONT TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

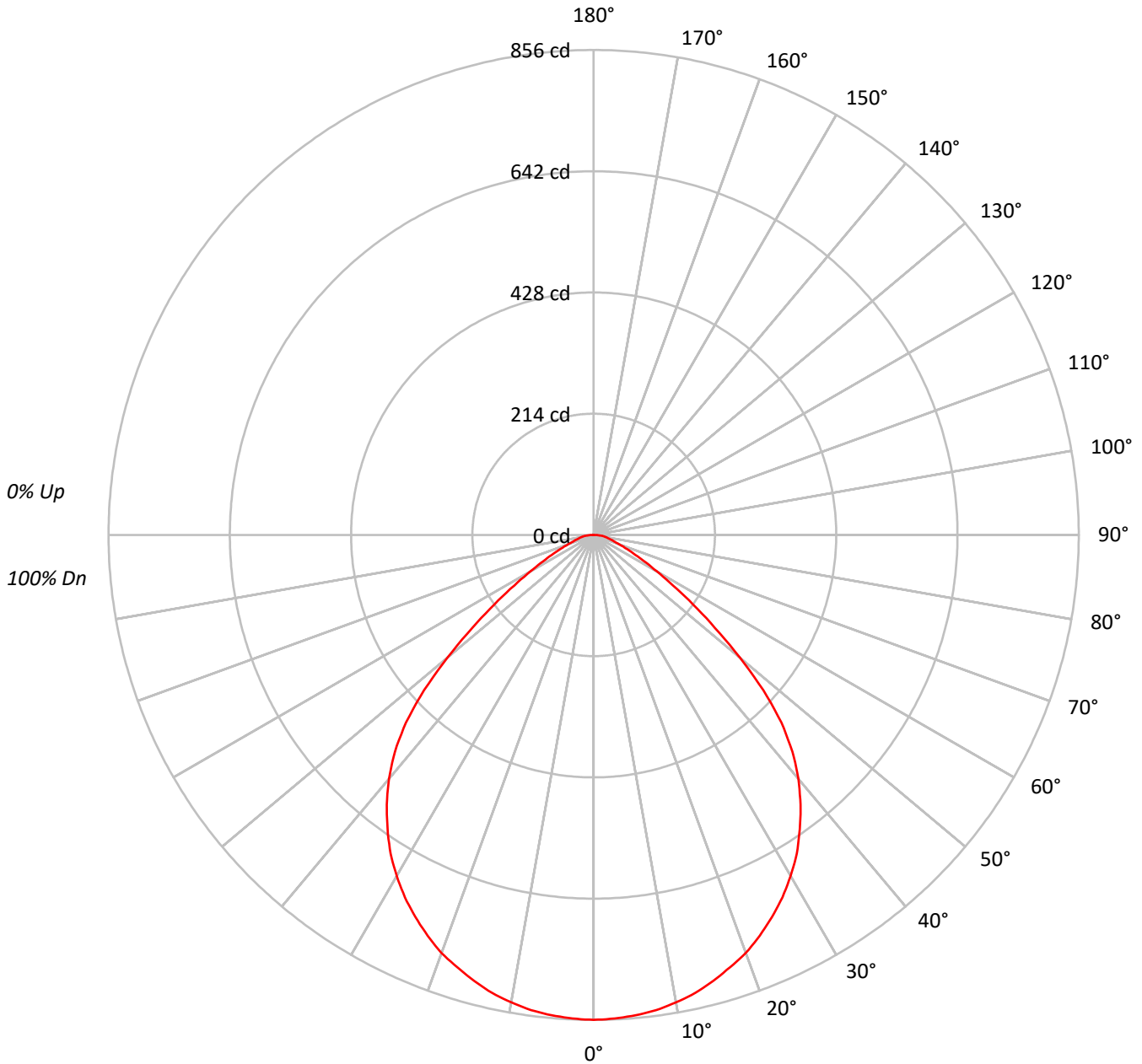
Lumens per Lamp: N/A
Luminaire Lumens: 1726.7 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.28
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 17.1
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 | | | 100 |
| 1 | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 94 | 92 | 90 | 89 | | | 89 |
| 2 | 103 | 96 | 91 | 86 | 101 | 94 | 89 | 85 | 91 | 87 | 83 | 88 | 84 | 81 | 85 | 82 | 80 | 78 | | | 78 |
| 3 | 95 | 87 | 80 | 74 | 93 | 85 | 79 | 74 | 82 | 77 | 72 | 80 | 75 | 71 | 77 | 73 | 70 | 68 | | | 68 |
| 4 | 88 | 78 | 71 | 65 | 86 | 77 | 70 | 64 | 75 | 68 | 64 | 72 | 67 | 63 | 70 | 66 | 62 | 60 | | | 60 |
| 5 | 82 | 71 | 63 | 57 | 80 | 70 | 62 | 57 | 68 | 61 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 53 | | | 53 |
| 6 | 76 | 65 | 57 | 51 | 75 | 64 | 56 | 51 | 62 | 55 | 50 | 60 | 54 | 50 | 59 | 54 | 50 | 48 | | | 48 |
| 7 | 71 | 59 | 51 | 46 | 70 | 58 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 54 | 49 | 45 | 43 | | | 43 |
| 8 | 67 | 54 | 47 | 41 | 65 | 54 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 40 | 39 | | | 39 |
| 9 | 62 | 50 | 43 | 37 | 61 | 49 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 46 | 41 | 37 | 35 | | | 35 |
| 10 | 59 | 46 | 39 | 34 | 57 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 34 | 43 | 38 | 34 | 32 | | | 32 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° |
|-----|-------|
| 0° | 46926 |
| 5° | 46836 |
| 10° | 46642 |
| 15° | 46249 |
| 20° | 45819 |
| 25° | 45021 |
| 30° | 43994 |
| 35° | 42443 |
| 40° | 40211 |
| 45° | 36306 |
| 50° | 28724 |
| 55° | 20415 |
| 60° | 14056 |
| 65° | 10014 |
| 70° | 7629 |
| 75° | 6608 |
| 80° | 6756 |
| 85° | 7233 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 36306 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 80.8 | 4.7 |
| 10°-20° | 229.9 | 13.3 |
| 20°-30° | 342.6 | 19.8 |
| 30°-40° | 395.6 | 22.9 |
| 40°-50° | 354.4 | 20.5 |
| 50°-60° | 195.9 | 11.3 |
| 60°-70° | 80.4 | 4.7 |
| 70°-80° | 34.2 | 2.0 |
| 80°-90° | 12.8 | 0.7 |
| 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° | 653.4 | 37.8 |
| 0°-40° | 1049.0 | 60.8 |
| 0°-60° | 1599.3 | 92.6 |
| 0°-90° | 1726.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1726.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 856 | |
| 5° | 851 | 81 |
| 15° | 815 | 230 |
| 25° | 744 | 343 |
| 35° | 634 | 396 |
| 45° | 468 | 354 |
| 55° | 214 | 196 |
| 65° | 77 | 80 |
| 75° | 31 | 34 |
| 85° | 12 | 13 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 856.0 |
| 2.5° | 854.4 |
| 5° | 851.1 |
| 7.5° | 846.2 |
| 10° | 837.9 |
| 12.5° | 828.1 |
| 15° | 814.9 |
| 17.5° | 800.2 |
| 20° | 785.4 |
| 22.5° | 765.6 |
| 25° | 744.3 |
| 27.5° | 721.3 |
| 30° | 695.0 |
| 32.5° | 667.1 |
| 35° | 634.2 |
| 37.5° | 599.7 |
| 40° | 561.9 |
| 42.5° | 519.2 |
| 45° | 468.3 |
| 47.5° | 405.8 |
| 50° | 336.8 |
| 52.5° | 269.5 |
| 55° | 213.6 |
| 57.5° | 165.9 |
| 60° | 128.2 |
| 62.5° | 100.2 |
| 65° | 77.2 |
| 67.5° | 60.8 |
| 70° | 47.6 |
| 72.5° | 37.8 |
| 75° | 31.2 |
| 77.5° | 26.3 |
| 80° | 21.4 |
| 82.5° | 18.1 |
| 85° | 11.5 |
| 87.5° | 6.6 |
| 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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