

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: P641578

Luminaire Tested: ML5612LSVWFL97FS1E - 591WB - 1200LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P641578
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-93)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSVWFL97FS1E - 591WB - 1200LM - 3500K
Description: ML56 RR, MILKY OPTIC, 5" DEADFRONT TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

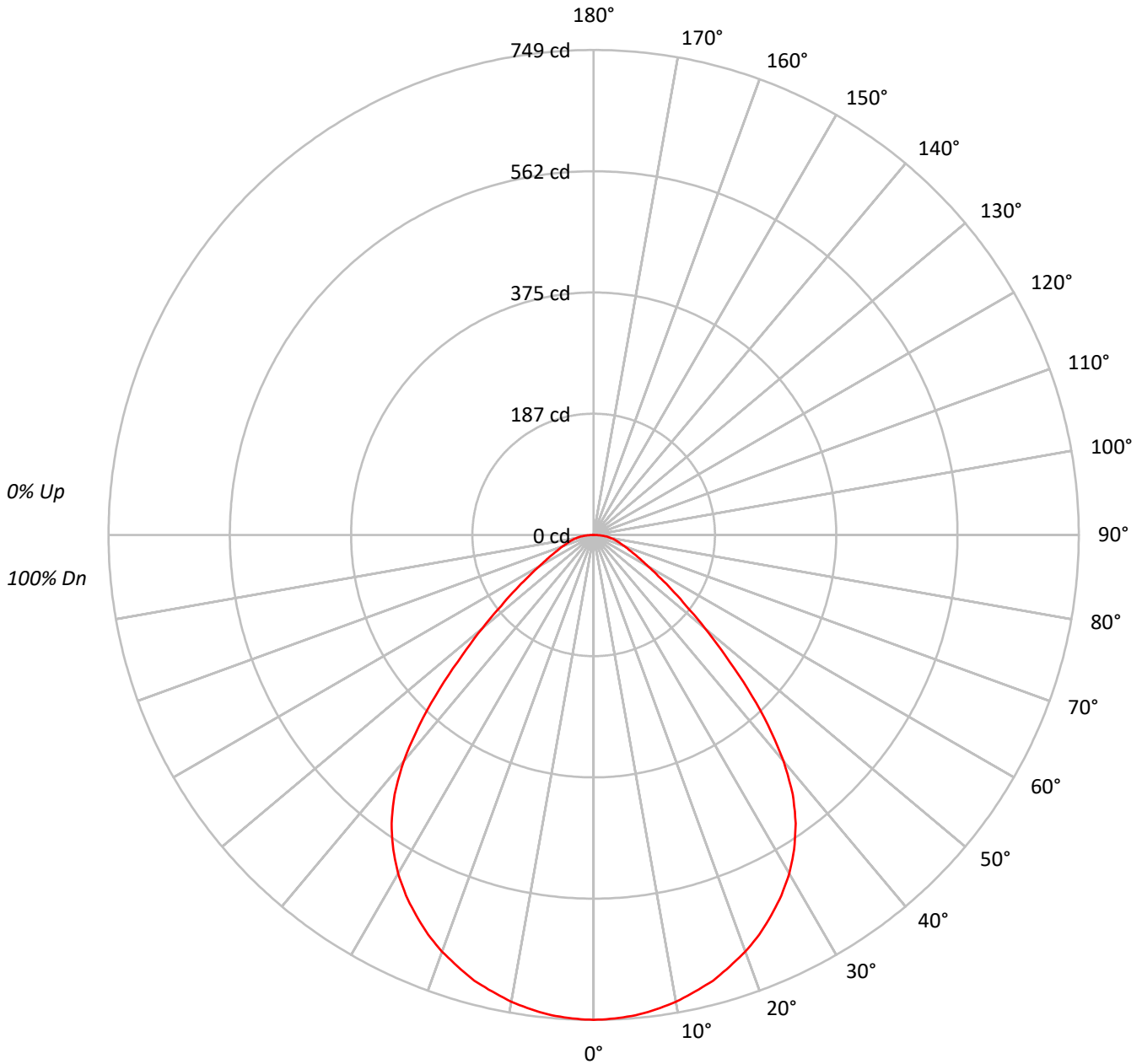
Lumens per Lamp: N/A
Luminaire Lumens: 1424.7 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.23
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 16.5
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 | | | | | | | | | |
| 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 | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 93 | 92 | 90 | 88 | | | | | | | | | | | | | | | | | | | |
| 2 | 103 | 96 | 91 | 86 | 100 | 94 | 89 | 85 | 91 | 87 | 83 | 88 | 84 | 81 | 85 | 82 | 79 | 77 | | | | | | | | | | | | | | | | | | | |
| 3 | 95 | 87 | 80 | 74 | 93 | 85 | 79 | 74 | 82 | 77 | 73 | 80 | 75 | 71 | 77 | 73 | 70 | 68 | | | | | | | | | | | | | | | | | | | |
| 4 | 89 | 78 | 71 | 65 | 87 | 77 | 70 | 65 | 75 | 69 | 64 | 73 | 67 | 63 | 71 | 66 | 62 | 61 | | | | | | | | | | | | | | | | | | | |
| 5 | 82 | 71 | 64 | 58 | 81 | 70 | 63 | 58 | 68 | 62 | 57 | 66 | 61 | 56 | 65 | 60 | 56 | 54 | | | | | | | | | | | | | | | | | | | |
| 6 | 77 | 65 | 57 | 52 | 75 | 64 | 57 | 52 | 63 | 56 | 51 | 61 | 55 | 51 | 60 | 54 | 50 | 49 | | | | | | | | | | | | | | | | | | | |
| 7 | 72 | 60 | 52 | 47 | 70 | 59 | 52 | 46 | 58 | 51 | 46 | 56 | 50 | 46 | 55 | 50 | 46 | 44 | | | | | | | | | | | | | | | | | | | |
| 8 | 67 | 55 | 47 | 42 | 66 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 51 | 46 | 41 | 40 | | | | | | | | | | | | | | | | | | | |
| 9 | 63 | 51 | 44 | 39 | 62 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 | | | | | | | | | | | | | | | | | | | |
| 10 | 59 | 47 | 40 | 35 | 58 | 47 | 40 | 35 | 46 | 40 | 35 | 45 | 39 | 35 | 44 | 39 | 35 | 33 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 59127 |
| 5° | 59020 |
| 10° | 58692 |
| 15° | 58246 |
| 20° | 57528 |
| 25° | 56485 |
| 30° | 55047 |
| 35° | 52415 |
| 40° | 47001 |
| 45° | 37522 |
| 50° | 27571 |
| 55° | 20149 |
| 60° | 15409 |
| 65° | 12758 |
| 70° | 11587 |
| 75° | 11499 |
| 80° | 12047 |
| 85° | 12590 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 37522 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 70.7 | 5.0 |
| 10°-20° | 200.7 | 14.1 |
| 20°-30° | 298.4 | 20.9 |
| 30°-40° | 336.6 | 23.6 |
| 40°-50° | 258.9 | 18.2 |
| 50°-60° | 134.8 | 9.5 |
| 60°-70° | 69.6 | 4.9 |
| 70°-80° | 39.9 | 2.8 |
| 80°-90° | 15.0 | 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° | 569.9 | 40.0 |
| 0°-40° | 906.5 | 63.6 |
| 0°-60° | 1300.2 | 91.3 |
| 0°-90° | 1424.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1424.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 749 | |
| 5° | 745 | 71 |
| 15° | 713 | 201 |
| 25° | 648 | 298 |
| 35° | 544 | 337 |
| 45° | 336 | 259 |
| 55° | 146 | 135 |
| 65° | 68 | 70 |
| 75° | 38 | 40 |
| 85° | 14 | 15 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 749.0 |
| 2.5° | 747.6 |
| 5° | 744.8 |
| 7.5° | 739.2 |
| 10° | 732.2 |
| 12.5° | 722.5 |
| 15° | 712.7 |
| 17.5° | 698.7 |
| 20° | 684.8 |
| 22.5° | 668.1 |
| 25° | 648.5 |
| 27.5° | 627.6 |
| 30° | 603.9 |
| 32.5° | 576.0 |
| 35° | 543.9 |
| 37.5° | 504.9 |
| 40° | 456.1 |
| 42.5° | 398.9 |
| 45° | 336.1 |
| 47.5° | 274.8 |
| 50° | 224.5 |
| 52.5° | 179.9 |
| 55° | 146.4 |
| 57.5° | 118.6 |
| 60° | 97.6 |
| 62.5° | 80.9 |
| 65° | 68.3 |
| 67.5° | 58.6 |
| 70° | 50.2 |
| 72.5° | 43.2 |
| 75° | 37.7 |
| 77.5° | 32.1 |
| 80° | 26.5 |
| 82.5° | 20.9 |
| 85° | 13.9 |
| 87.5° | 7.0 |
| 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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Scaled Data Report



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