

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: P643399

Luminaire Tested: ML5615LSVWFL9FS1E - 591WB - 1500LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P643399
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: ML5615LSVWFL9FS1E - 591WB - 1500LM - 4000K
Description: ML56 RR, MILKY OPTIC, 5" DEADFRONT TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

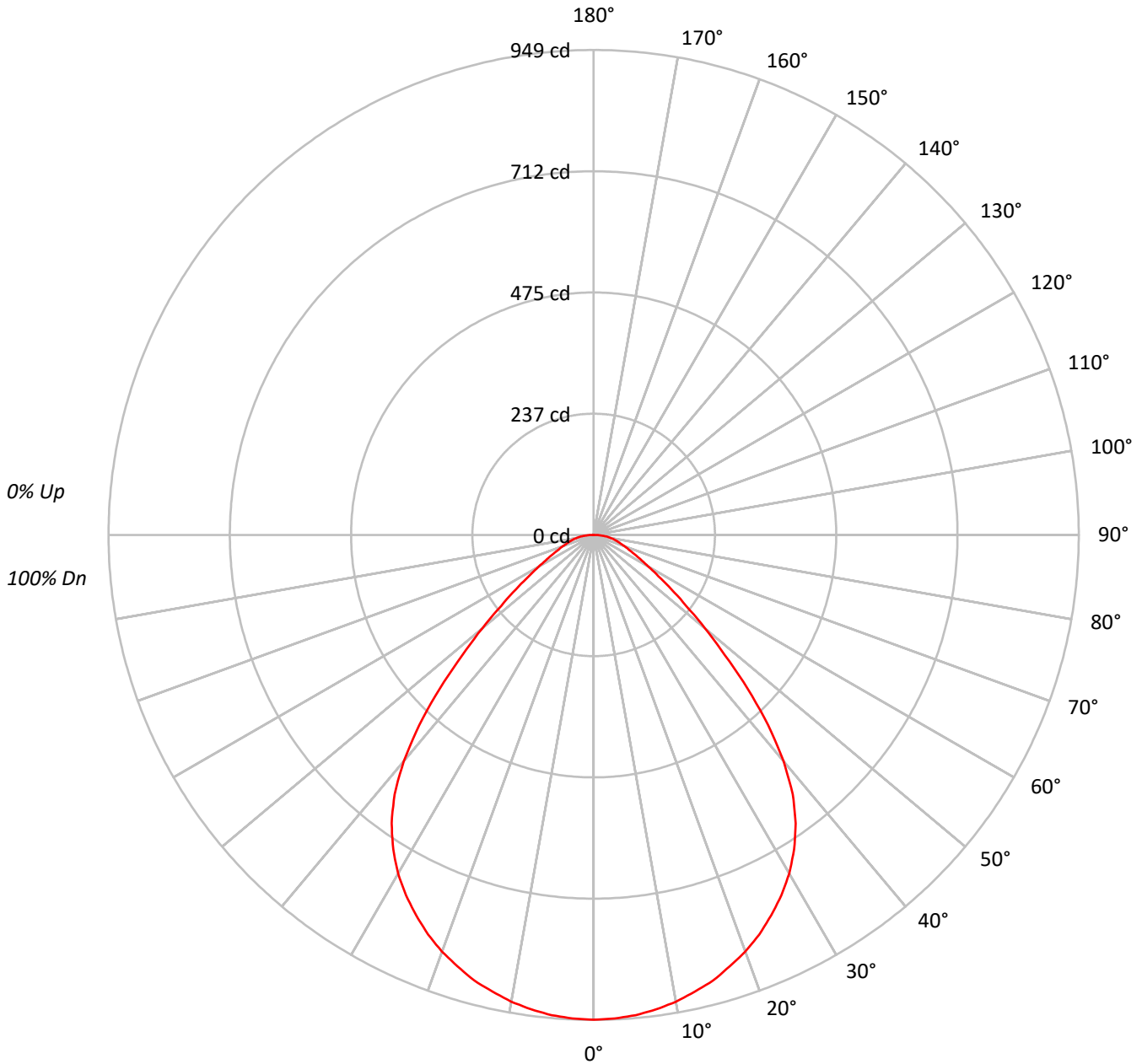
Lumens per Lamp: N/A
Luminaire Lumens: 1804.8 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.23
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 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 | | | | | | | | | |
| 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° | 74891 |
| 5° | 74757 |
| 10° | 74347 |
| 15° | 73782 |
| 20° | 72876 |
| 25° | 71554 |
| 30° | 69732 |
| 35° | 66398 |
| 40° | 59532 |
| 45° | 47536 |
| 50° | 34927 |
| 55° | 25530 |
| 60° | 19530 |
| 65° | 16176 |
| 70° | 14679 |
| 75° | 14549 |
| 80° | 15275 |
| 85° | 16032 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 47536 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 89.5 | 5.0 |
| 10°-20° | 254.3 | 14.1 |
| 20°-30° | 378.1 | 20.9 |
| 30°-40° | 426.4 | 23.6 |
| 40°-50° | 327.9 | 18.2 |
| 50°-60° | 170.8 | 9.5 |
| 60°-70° | 88.2 | 4.9 |
| 70°-80° | 50.6 | 2.8 |
| 80°-90° | 19.0 | 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° | 721.9 | 40.0 |
| 0°-40° | 1148.3 | 63.6 |
| 0°-60° | 1647.0 | 91.3 |
| 0°-90° | 1804.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1804.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 949 | |
| 5° | 943 | 90 |
| 15° | 903 | 254 |
| 25° | 822 | 378 |
| 35° | 689 | 426 |
| 45° | 426 | 328 |
| 55° | 186 | 171 |
| 65° | 87 | 88 |
| 75° | 48 | 51 |
| 85° | 18 | 19 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 948.7 |
| 2.5° | 947.0 |
| 5° | 943.4 |
| 7.5° | 936.4 |
| 10° | 927.5 |
| 12.5° | 915.2 |
| 15° | 902.8 |
| 17.5° | 885.1 |
| 20° | 867.5 |
| 22.5° | 846.3 |
| 25° | 821.5 |
| 27.5° | 795.0 |
| 30° | 765.0 |
| 32.5° | 729.7 |
| 35° | 689.0 |
| 37.5° | 639.6 |
| 40° | 577.7 |
| 42.5° | 505.3 |
| 45° | 425.8 |
| 47.5° | 348.0 |
| 50° | 284.4 |
| 52.5° | 227.9 |
| 55° | 185.5 |
| 57.5° | 150.2 |
| 60° | 123.7 |
| 62.5° | 102.5 |
| 65° | 86.6 |
| 67.5° | 74.2 |
| 70° | 63.6 |
| 72.5° | 54.8 |
| 75° | 47.7 |
| 77.5° | 40.6 |
| 80° | 33.6 |
| 82.5° | 26.5 |
| 85° | 17.7 |
| 87.5° | 8.8 |
| 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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