

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: P643823

Luminaire Tested: ML5615LSWFL559FS1E - 593SNB - 900LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P643823
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-53)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSWFL559FS1E - 593SNB - 900LM - 3500K
Description: ML56 RR, 55D TIR OPTIC, 5" SATIN NICKLE BAFFLE TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1168.6 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

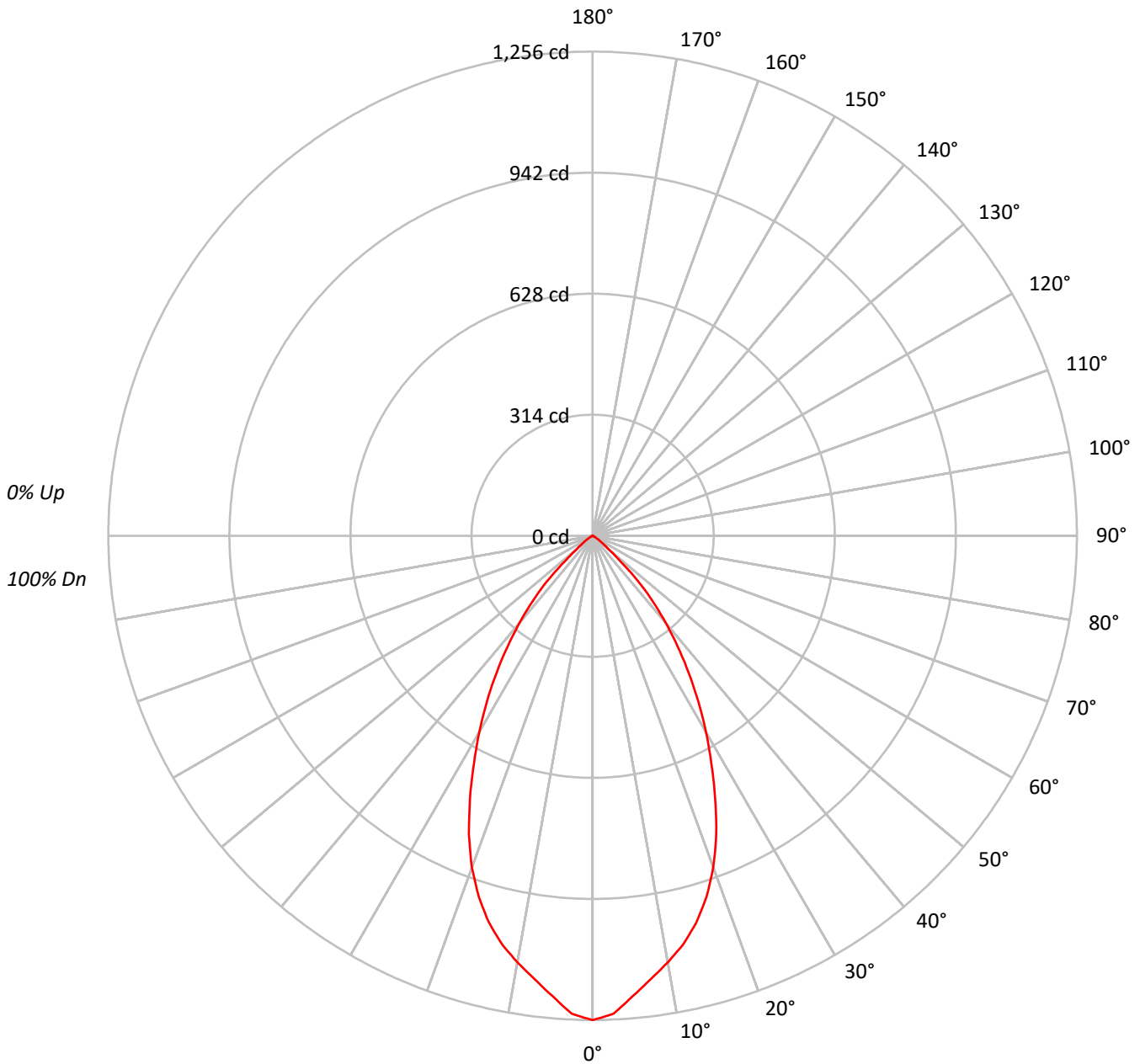
Input Watts (W): 10.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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 | | | 100 | | | | | | | | | | | | | | | | |
| 1 | 113 | 110 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 93 | | | 93 | | | | | | | | | | | | | | | | |
| 2 | 107 | 102 | 98 | 94 | 105 | 101 | 97 | 93 | 97 | 94 | 91 | 94 | 92 | 89 | 91 | 89 | 88 | 86 | | | 86 | | | | | | | | | | | | | | | | |
| 3 | 102 | 95 | 90 | 85 | 100 | 93 | 89 | 85 | 91 | 87 | 83 | 88 | 85 | 82 | 86 | 83 | 81 | 79 | | | 79 | | | | | | | | | | | | | | | | |
| 4 | 96 | 88 | 82 | 78 | 94 | 87 | 82 | 77 | 85 | 80 | 76 | 83 | 79 | 76 | 81 | 77 | 75 | 73 | | | 73 | | | | | | | | | | | | | | | | |
| 5 | 91 | 82 | 76 | 71 | 89 | 81 | 75 | 71 | 79 | 74 | 70 | 78 | 73 | 70 | 76 | 72 | 69 | 68 | | | 68 | | | | | | | | | | | | | | | | |
| 6 | 86 | 77 | 70 | 66 | 84 | 76 | 70 | 66 | 74 | 69 | 65 | 73 | 68 | 65 | 71 | 67 | 64 | 63 | | | 63 | | | | | | | | | | | | | | | | |
| 7 | 81 | 72 | 65 | 61 | 80 | 71 | 65 | 61 | 70 | 64 | 60 | 68 | 64 | 60 | 67 | 63 | 60 | 58 | | | 58 | | | | | | | | | | | | | | | | |
| 8 | 77 | 67 | 61 | 57 | 76 | 67 | 61 | 56 | 65 | 60 | 56 | 64 | 60 | 56 | 63 | 59 | 56 | 54 | | | 54 | | | | | | | | | | | | | | | | |
| 9 | 73 | 63 | 57 | 53 | 72 | 63 | 57 | 53 | 62 | 56 | 53 | 61 | 56 | 52 | 60 | 55 | 52 | 51 | | | 51 | | | | | | | | | | | | | | | | |
| 10 | 70 | 59 | 53 | 49 | 69 | 59 | 53 | 49 | 58 | 53 | 49 | 57 | 52 | 49 | 57 | 52 | 49 | 48 | | | 48 | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 99189 |
| 5° | 94964 |
| 10° | 90050 |
| 15° | 84897 |
| 20° | 76883 |
| 25° | 65535 |
| 30° | 53562 |
| 35° | 41853 |
| 40° | 30379 |
| 45° | 18878 |
| 50° | 6484 |
| 55° | 3055 |
| 60° | 1168 |
| 65° | 392 |
| 70° | 254 |
| 75° | 336 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18878 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 112.1 | 9.6 |
| 10°-20° | 289.3 | 24.8 |
| 20°-30° | 343.6 | 29.4 |
| 30°-40° | 271.0 | 23.2 |
| 40°-50° | 126.9 | 10.9 |
| 50°-60° | 22.0 | 1.9 |
| 60°-70° | 2.9 | 0.2 |
| 70°-80° | 0.7 | 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° | 745.1 | 63.8 |
| 0°-40° | 1016.1 | 86.9 |
| 0°-60° | 1165.0 | 99.7 |
| 0°-90° | 1168.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1168.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1256 | |
| 5° | 1198 | 112 |
| 15° | 1039 | 289 |
| 25° | 752 | 344 |
| 35° | 434 | 271 |
| 45° | 169 | 127 |
| 55° | 22 | 22 |
| 65° | 2 | 3 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1256.5 |
| 2.5° | 1240.7 |
| 5° | 1198.4 |
| 7.5° | 1159.3 |
| 10° | 1123.4 |
| 12.5° | 1085.3 |
| 15° | 1038.8 |
| 17.5° | 981.7 |
| 20° | 915.2 |
| 22.5° | 838.0 |
| 25° | 752.4 |
| 27.5° | 666.8 |
| 30° | 587.6 |
| 32.5° | 510.4 |
| 35° | 434.3 |
| 37.5° | 362.5 |
| 40° | 294.8 |
| 42.5° | 231.4 |
| 45° | 169.1 |
| 47.5° | 95.1 |
| 50° | 52.8 |
| 52.5° | 33.8 |
| 55° | 22.2 |
| 57.5° | 13.7 |
| 60° | 7.4 |
| 62.5° | 4.2 |
| 65° | 2.1 |
| 67.5° | 1.1 |
| 70° | 1.1 |
| 72.5° | 1.1 |
| 75° | 1.1 |
| 77.5° | 0.0 |
| 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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Scaled Data Report



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