

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: P643895

Luminaire Tested: ML5615LSWFL559FS1E - 594WB - 1500LM - 5000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P643895
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-55)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSWFL559FS1E - 594WB - 1500LM - 5000K
Description: ML56 RR, 55D TIR OPTIC, 5" WHITE GIMBAL TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

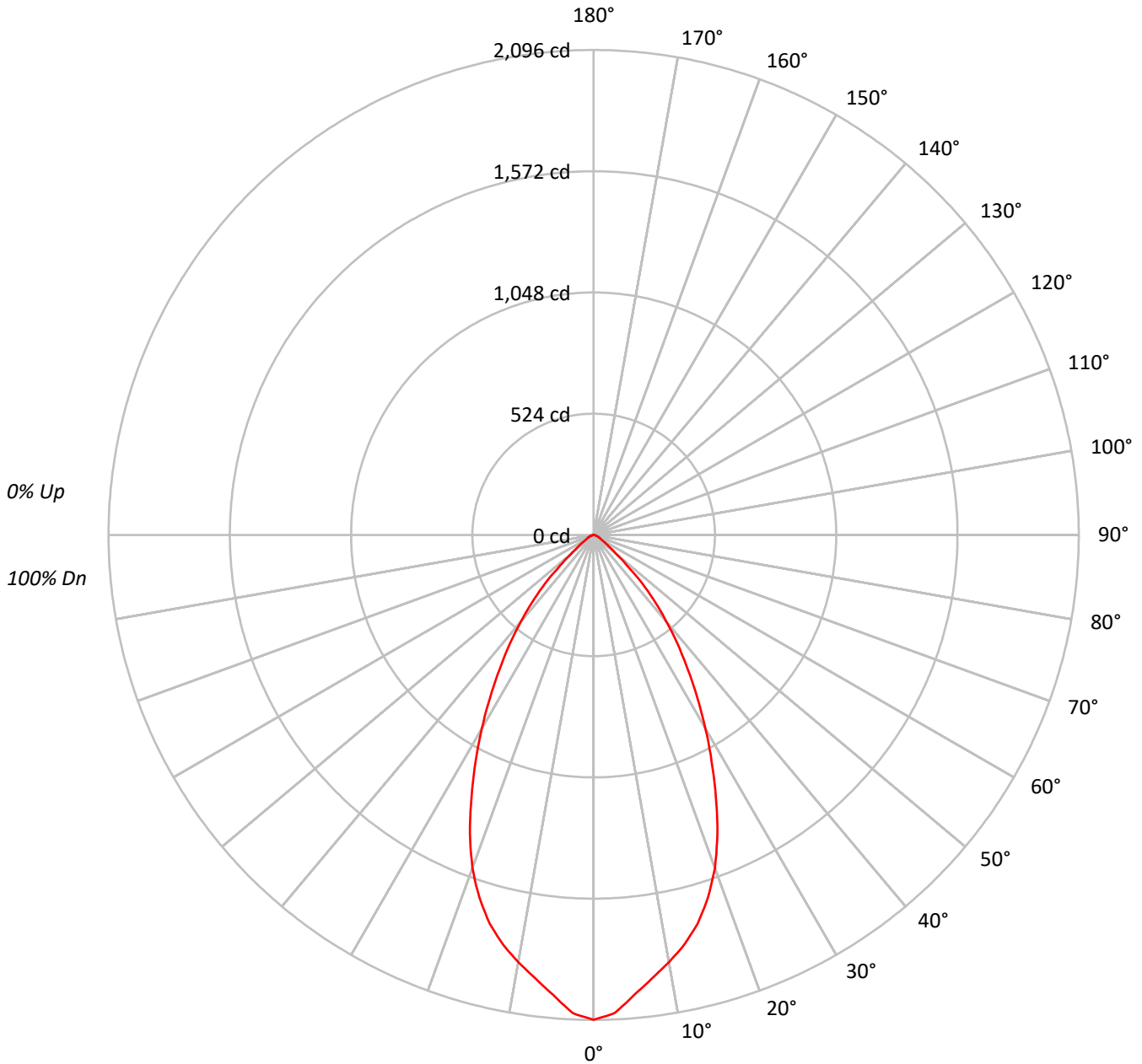
Lumens per Lamp: N/A
Luminaire Lumens: 2010.6 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.88
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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 | | | | | | | | | 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 | 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 | 113 | 110 | 107 | 105 | 110 | 108 | 105 | 103 | 104 | 102 | 100 | 100 | 98 | 97 | 97 | 95 | 94 | 92 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 107 | 101 | 97 | 93 | 105 | 100 | 96 | 92 | 96 | 93 | 90 | 93 | 91 | 88 | 91 | 88 | 87 | 85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 101 | 94 | 88 | 84 | 99 | 92 | 87 | 83 | 90 | 86 | 82 | 87 | 84 | 81 | 85 | 82 | 80 | 78 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 95 | 87 | 81 | 76 | 93 | 86 | 80 | 76 | 84 | 79 | 75 | 82 | 77 | 74 | 80 | 76 | 73 | 72 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 90 | 81 | 74 | 70 | 88 | 80 | 74 | 69 | 78 | 73 | 69 | 76 | 72 | 68 | 75 | 71 | 68 | 66 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 85 | 75 | 69 | 64 | 83 | 74 | 68 | 64 | 73 | 68 | 64 | 71 | 67 | 63 | 70 | 66 | 63 | 61 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 80 | 70 | 64 | 59 | 79 | 70 | 64 | 59 | 68 | 63 | 59 | 67 | 62 | 59 | 66 | 62 | 58 | 57 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 76 | 66 | 59 | 55 | 75 | 65 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 54 | 62 | 58 | 54 | 53 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 72 | 62 | 56 | 51 | 71 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 59 | 54 | 51 | 49 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 69 | 58 | 52 | 48 | 68 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 48 | 55 | 51 | 47 | 46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 165436 |
| 5° | 158215 |
| 10° | 150266 |
| 15° | 142072 |
| 20° | 128657 |
| 25° | 108755 |
| 30° | 88017 |
| 35° | 68345 |
| 40° | 50484 |
| 45° | 33168 |
| 50° | 15855 |
| 55° | 8519 |
| 60° | 5857 |
| 65° | 4632 |
| 70° | 4085 |
| 75° | 2684 |
| 80° | 1591 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 33168 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 186.9 | 9.3 |
| 10°-20° | 483.8 | 24.1 |
| 20°-30° | 570.5 | 28.4 |
| 30°-40° | 444.3 | 22.1 |
| 40°-50° | 226.8 | 11.3 |
| 50°-60° | 61.9 | 3.1 |
| 60°-70° | 25.6 | 1.3 |
| 70°-80° | 9.8 | 0.5 |
| 80°-90° | 1.0 | 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° | 1241.3 | 61.7 |
| 0°-40° | 1685.6 | 83.8 |
| 0°-60° | 1974.3 | 98.2 |
| 0°-90° | 2010.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2010.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2096 | |
| 5° | 1997 | 187 |
| 15° | 1738 | 484 |
| 25° | 1249 | 571 |
| 35° | 709 | 444 |
| 45° | 297 | 227 |
| 55° | 62 | 62 |
| 65° | 25 | 26 |
| 75° | 9 | 10 |
| 85° | 0 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2095.7 |
| 2.5° | 2069.1 |
| 5° | 1996.6 |
| 7.5° | 1933.0 |
| 10° | 1874.6 |
| 12.5° | 1812.7 |
| 15° | 1738.4 |
| 17.5° | 1642.9 |
| 20° | 1531.5 |
| 22.5° | 1397.1 |
| 25° | 1248.6 |
| 27.5° | 1103.5 |
| 30° | 965.6 |
| 32.5° | 833.0 |
| 35° | 709.2 |
| 37.5° | 596.0 |
| 40° | 489.9 |
| 42.5° | 390.8 |
| 45° | 297.1 |
| 47.5° | 194.5 |
| 50° | 129.1 |
| 52.5° | 88.4 |
| 55° | 61.9 |
| 57.5° | 46.0 |
| 60° | 37.1 |
| 62.5° | 30.1 |
| 65° | 24.8 |
| 67.5° | 21.2 |
| 70° | 17.7 |
| 72.5° | 12.4 |
| 75° | 8.8 |
| 77.5° | 5.3 |
| 80° | 3.5 |
| 82.5° | 1.8 |
| 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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