

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: P643512

Luminaire Tested: ML5615LSVWFL9FS1E - 594SNB - 1200LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P643512
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-102)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSVWFL9FS1E - 594SNB - 1200LM - 3000K
Description: ML56 RR, MILKY OPTIC, 5" SATIN NICKLE GIMBAL TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

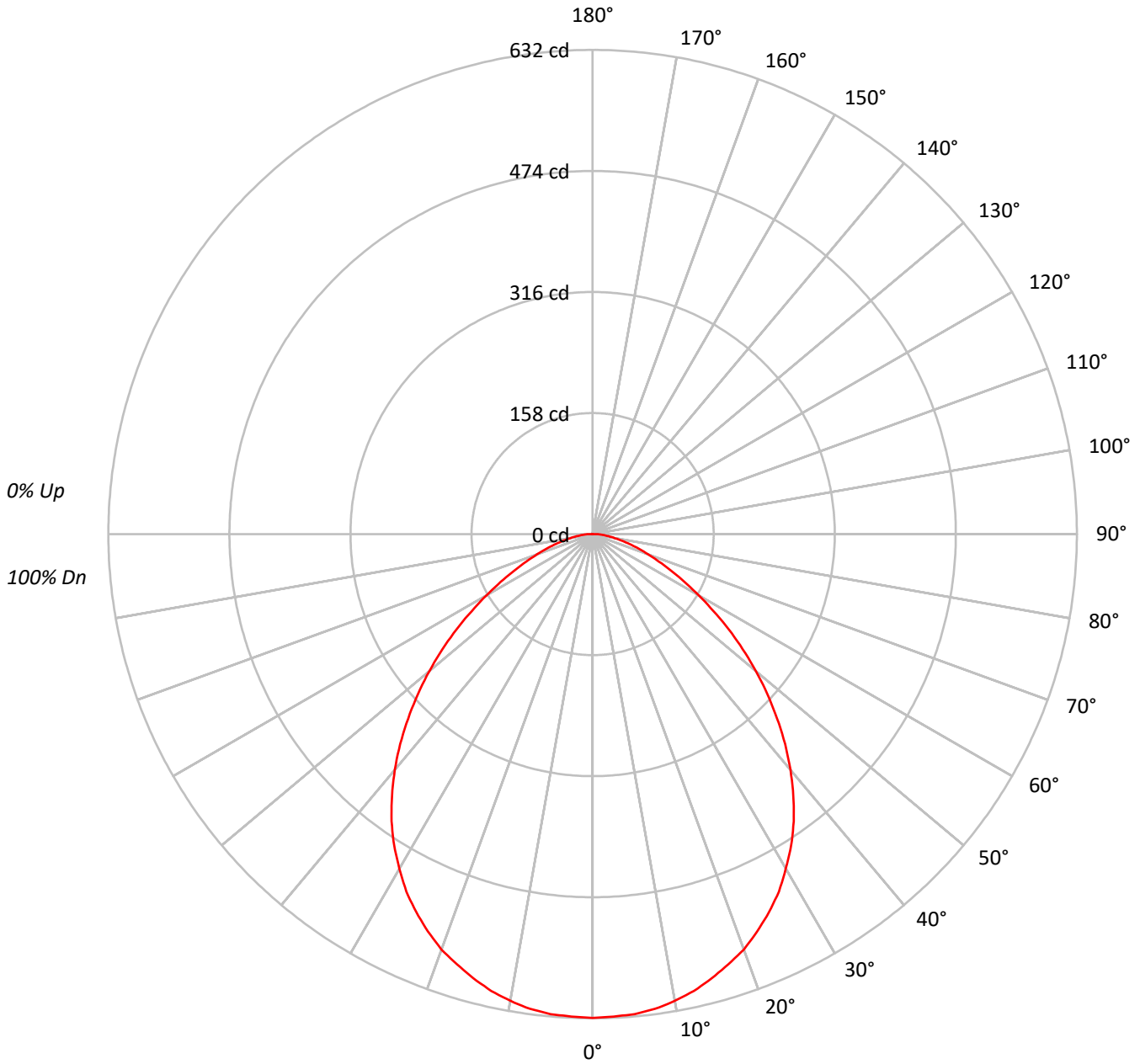
Lumens per Lamp: N/A
Luminaire Lumens: 1403.7 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.26
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 13.4
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 | 110 | 106 | 102 | 99 | 108 | 104 | 100 | 97 | 100 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 89 | 87 | | | | | | | | | | | | | | | | | | | |
| 2 | 101 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 85 | 82 | 78 | 83 | 79 | 76 | 74 | | | | | | | | | | | | | | | | | | | |
| 3 | 93 | 84 | 76 | 70 | 91 | 82 | 75 | 70 | 79 | 73 | 69 | 77 | 72 | 67 | 74 | 70 | 66 | 64 | | | | | | | | | | | | | | | | | | | |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 60 | 71 | 65 | 60 | 69 | 63 | 59 | 67 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | |
| 5 | 80 | 68 | 59 | 53 | 78 | 67 | 59 | 53 | 65 | 58 | 52 | 63 | 57 | 52 | 61 | 56 | 51 | 49 | | | | | | | | | | | | | | | | | | | |
| 6 | 74 | 61 | 53 | 47 | 72 | 60 | 53 | 47 | 59 | 52 | 46 | 57 | 51 | 46 | 56 | 50 | 46 | 44 | | | | | | | | | | | | | | | | | | | |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 47 | 42 | 54 | 47 | 42 | 52 | 46 | 41 | 51 | 45 | 41 | 39 | | | | | | | | | | | | | | | | | | | |
| 8 | 64 | 51 | 43 | 38 | 63 | 51 | 43 | 38 | 49 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 35 | | | | | | | | | | | | | | | | | | | |
| 9 | 60 | 47 | 39 | 34 | 59 | 47 | 39 | 34 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 34 | 32 | | | | | | | | | | | | | | | | | | | |
| 10 | 56 | 44 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 41 | 35 | 31 | 29 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 49859 |
| 5° | 49844 |
| 10° | 49586 |
| 15° | 49068 |
| 20° | 48472 |
| 25° | 47427 |
| 30° | 45959 |
| 35° | 44089 |
| 40° | 41385 |
| 45° | 38013 |
| 50° | 34154 |
| 55° | 29866 |
| 60° | 25230 |
| 65° | 21126 |
| 70° | 17703 |
| 75° | 15067 |
| 80° | 13002 |
| 85° | 12952 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 38013 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 59.7 | 4.3 |
| 10°-20° | 169.3 | 12.1 |
| 20°-30° | 250.5 | 17.8 |
| 30°-40° | 285.0 | 20.3 |
| 40°-50° | 262.3 | 18.7 |
| 50°-60° | 194.1 | 13.8 |
| 60°-70° | 113.7 | 8.1 |
| 70°-80° | 53.3 | 3.8 |
| 80°-90° | 15.9 | 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° | 479.5 | 34.2 |
| 0°-40° | 764.5 | 54.5 |
| 0°-60° | 1220.8 | 87.0 |
| 0°-90° | 1403.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1403.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 632 | |
| 5° | 629 | 60 |
| 15° | 600 | 169 |
| 25° | 544 | 250 |
| 35° | 458 | 285 |
| 45° | 340 | 262 |
| 55° | 217 | 194 |
| 65° | 113 | 114 |
| 75° | 49 | 53 |
| 85° | 14 | 16 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 631.6 |
| 2.5° | 630.3 |
| 5° | 629.0 |
| 7.5° | 625.1 |
| 10° | 618.6 |
| 12.5° | 610.8 |
| 15° | 600.4 |
| 17.5° | 588.7 |
| 20° | 577.0 |
| 22.5° | 561.4 |
| 25° | 544.5 |
| 27.5° | 526.3 |
| 30° | 504.2 |
| 32.5° | 482.1 |
| 35° | 457.5 |
| 37.5° | 430.2 |
| 40° | 401.6 |
| 42.5° | 371.7 |
| 45° | 340.5 |
| 47.5° | 309.3 |
| 50° | 278.1 |
| 52.5° | 246.9 |
| 55° | 217.0 |
| 57.5° | 187.1 |
| 60° | 159.8 |
| 62.5° | 135.2 |
| 65° | 113.1 |
| 67.5° | 93.6 |
| 70° | 76.7 |
| 72.5° | 62.4 |
| 75° | 49.4 |
| 77.5° | 37.7 |
| 80° | 28.6 |
| 82.5° | 20.8 |
| 85° | 14.3 |
| 87.5° | 9.1 |
| 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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