

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P643539

Luminaire Tested: ML5615LSVWFL9FS1E - 594TBZB - 900LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P643539
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-103)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSVWFL9FS1E - 594TBZB - 900LM - 4000K
Description: ML56 RR, MILKY OPTIC, 5" TUSCON BRONZE GIMBAL TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

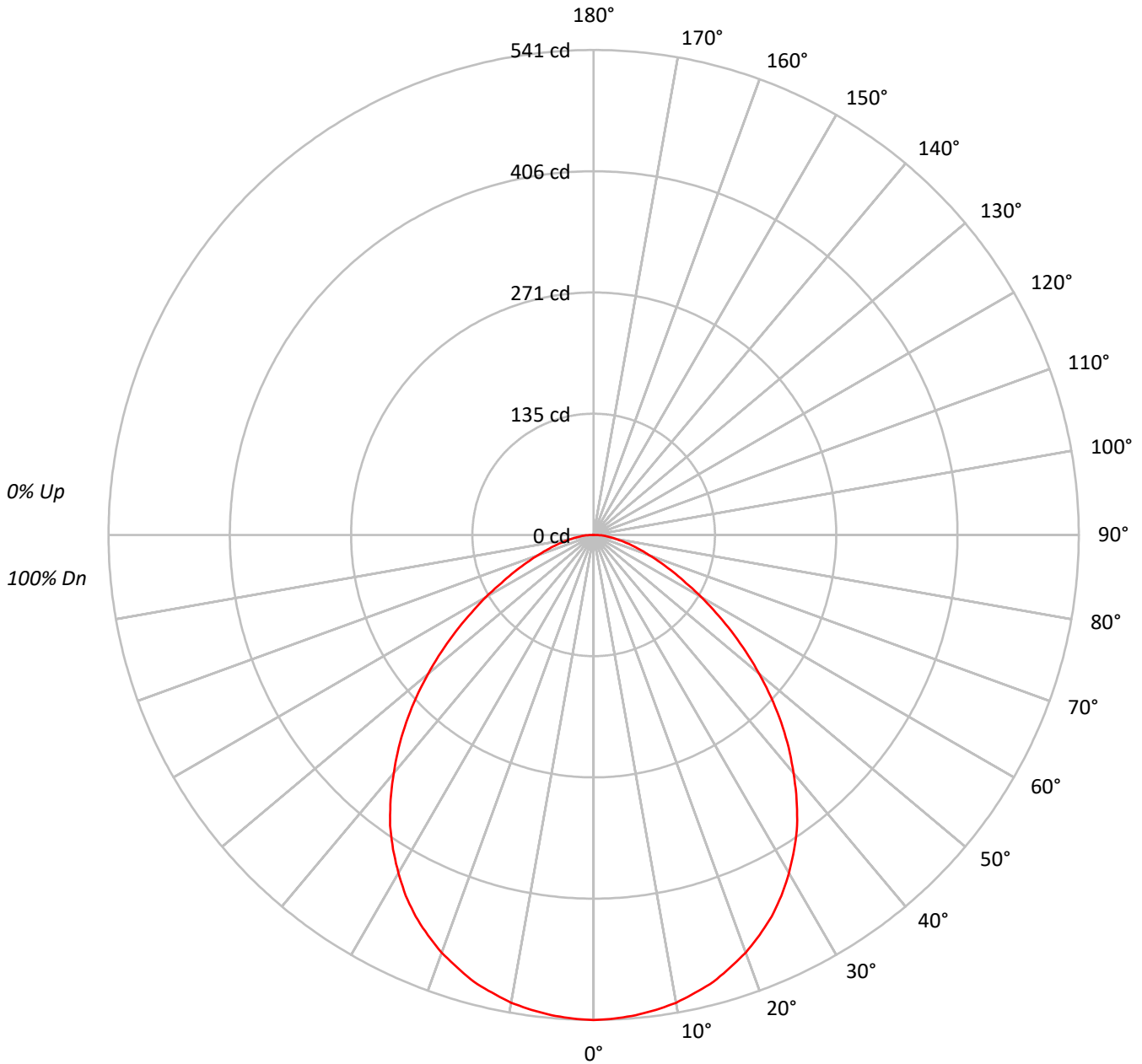
Lumens per Lamp: N/A
Luminaire Lumens: 1211.9 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.27
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P643539
CATALOG NUMBER: ML5615LSVWFL9FS1E - 594TBZB - 900LM - 4000K

Luminous Intensity Polar Plot





TEST NUMBER: P643539

CATALOG NUMBER: ML5615LSVWFL9FS1E - 594TBZB - 900LM - 4000K

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 | 107 | 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 | 82 | 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 | 79 | 68 | 59 | 53 | 77 | 67 | 59 | 53 | 64 | 58 | 52 | 63 | 57 | 52 | 61 | 55 | 51 | 49 | | | | | | | | | | | | | | | | | | | |
| 6 | 74 | 61 | 53 | 47 | 72 | 60 | 52 | 47 | 59 | 52 | 46 | 57 | 51 | 46 | 55 | 50 | 46 | 44 | | | | | | | | | | | | | | | | | | | |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 47 | 42 | 54 | 47 | 41 | 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 | 44 | 38 | 34 | 43 | 38 | 34 | 32 | | | | | | | | | | | | | | | | | | | |
| 10 | 56 | 44 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 40 | 35 | 31 | 29 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 42723 |
| 5° | 42617 |
| 10° | 42476 |
| 15° | 42187 |
| 20° | 41651 |
| 25° | 40903 |
| 30° | 39697 |
| 35° | 38133 |
| 40° | 35738 |
| 45° | 33001 |
| 50° | 29610 |
| 55° | 25819 |
| 60° | 21898 |
| 65° | 18268 |
| 70° | 15233 |
| 75° | 13176 |
| 80° | 11365 |
| 85° | 11322 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 33001 cd/sqm



TEST NUMBER: P643539

CATALOG NUMBER: ML5615LSVWFL9FS1E - 594TBZB - 900LM - 4000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 51.1 | 4.2 |
| 10°-20° | 145.4 | 12.0 |
| 20°-30° | 215.8 | 17.8 |
| 30°-40° | 246.2 | 20.3 |
| 40°-50° | 227.3 | 18.8 |
| 50°-60° | 168.0 | 13.9 |
| 60°-70° | 98.0 | 8.1 |
| 70°-80° | 46.2 | 3.8 |
| 80°-90° | 13.9 | 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° | 412.3 | 34.0 |
| 0°-40° | 658.5 | 54.3 |
| 0°-60° | 1053.8 | 87.0 |
| 0°-90° | 1211.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1211.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 541 | |
| 5° | 538 | 51 |
| 15° | 516 | 145 |
| 25° | 470 | 216 |
| 35° | 396 | 246 |
| 45° | 296 | 227 |
| 55° | 188 | 168 |
| 65° | 98 | 98 |
| 75° | 43 | 46 |
| 85° | 12 | 14 |
| 90° | 0 | |



TEST NUMBER: P643539

CATALOG NUMBER: ML5615LSVWFL9FS1E - 594TBZB - 900LM - 4000K

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 541.2 |
| 2.5° | 540.1 |
| 5° | 537.8 |
| 7.5° | 534.4 |
| 10° | 529.9 |
| 12.5° | 523.1 |
| 15° | 516.2 |
| 17.5° | 506.0 |
| 20° | 495.8 |
| 22.5° | 483.3 |
| 25° | 469.6 |
| 27.5° | 453.7 |
| 30° | 435.5 |
| 32.5° | 416.2 |
| 35° | 395.7 |
| 37.5° | 371.8 |
| 40° | 346.8 |
| 42.5° | 321.8 |
| 45° | 295.6 |
| 47.5° | 268.3 |
| 50° | 241.1 |
| 52.5° | 213.8 |
| 55° | 187.6 |
| 57.5° | 161.5 |
| 60° | 138.7 |
| 62.5° | 116.0 |
| 65° | 97.8 |
| 67.5° | 80.7 |
| 70° | 66.0 |
| 72.5° | 53.4 |
| 75° | 43.2 |
| 77.5° | 33.0 |
| 80° | 25.0 |
| 82.5° | 18.2 |
| 85° | 12.5 |
| 87.5° | 8.0 |
| 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

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)