

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: P641032

Luminaire Tested: ML5612LSNFL2597FS1E - 594TBZB - 900LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P641032
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSNFL2597FS1E - 594TBZB - 900LM - 3000K
Description: ML56 RR, 25D TIR OPTIC, 5" TUSCON BRONZE GIMBAL TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1227.7 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.43
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

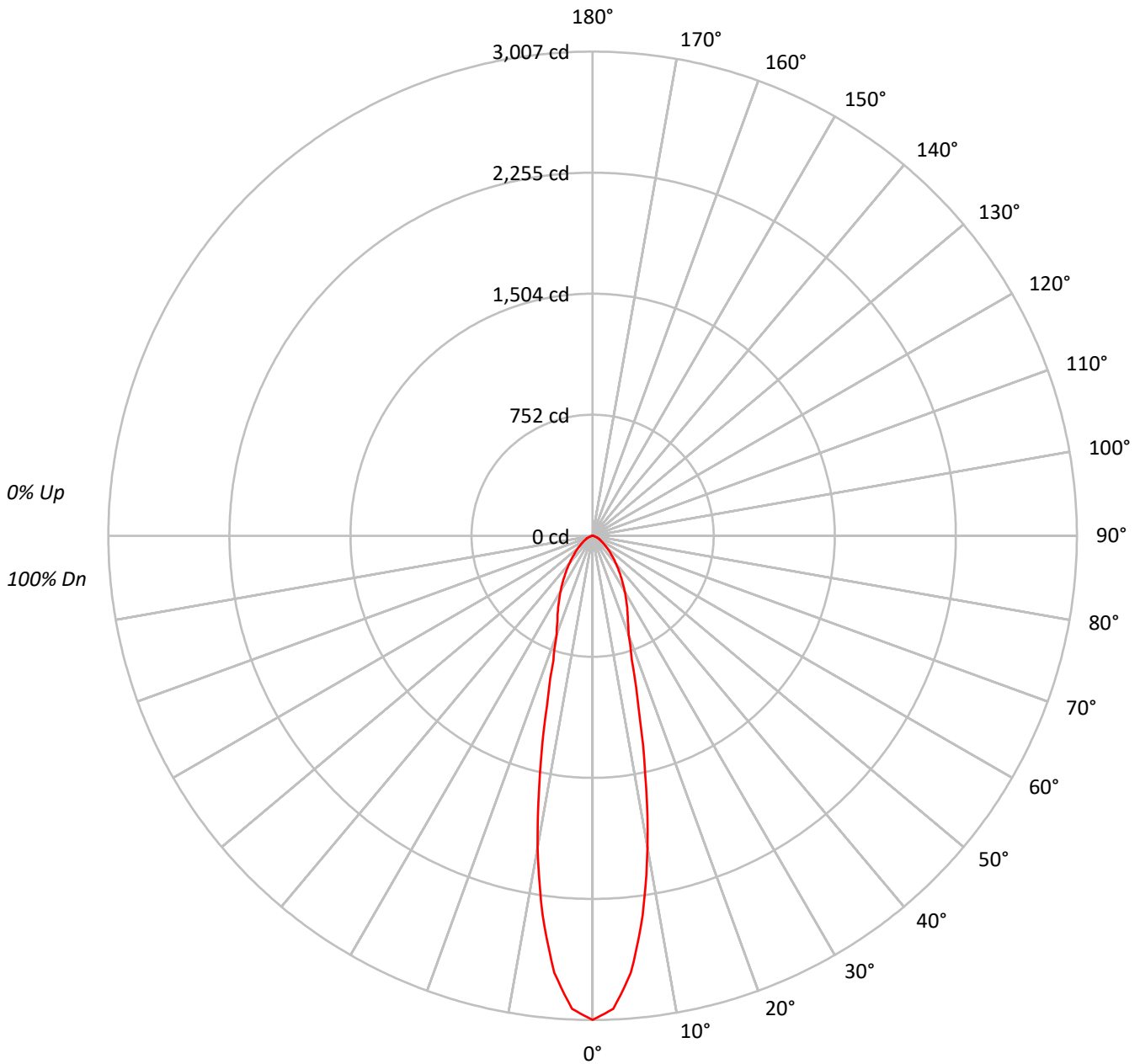
Input Watts (W): 13.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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 | 113 | 110 | 107 | 105 | 111 | 108 | 105 | 103 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 95 | 94 | 92 | | | | | | | | | | | | | | | | | | | |
| 2 | 107 | 102 | 97 | 94 | 105 | 100 | 96 | 93 | 97 | 93 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | 85 | | | | | | | | | | | | | | | | | | | |
| 3 | 101 | 94 | 89 | 85 | 99 | 93 | 88 | 84 | 90 | 86 | 83 | 88 | 84 | 81 | 85 | 83 | 80 | 78 | | | | | | | | | | | | | | | | | | | |
| 4 | 96 | 88 | 82 | 77 | 94 | 87 | 81 | 77 | 84 | 80 | 76 | 82 | 78 | 75 | 81 | 77 | 74 | 73 | | | | | | | | | | | | | | | | | | | |
| 5 | 91 | 82 | 76 | 72 | 89 | 81 | 76 | 71 | 79 | 74 | 71 | 78 | 73 | 70 | 76 | 72 | 69 | 68 | | | | | | | | | | | | | | | | | | | |
| 6 | 86 | 77 | 71 | 67 | 85 | 76 | 71 | 66 | 75 | 70 | 66 | 73 | 69 | 65 | 72 | 68 | 65 | 64 | | | | | | | | | | | | | | | | | | | |
| 7 | 82 | 73 | 67 | 62 | 81 | 72 | 66 | 62 | 71 | 66 | 62 | 70 | 65 | 62 | 69 | 64 | 61 | 60 | | | | | | | | | | | | | | | | | | | |
| 8 | 79 | 69 | 63 | 59 | 77 | 68 | 63 | 59 | 67 | 62 | 58 | 66 | 62 | 58 | 65 | 61 | 58 | 57 | | | | | | | | | | | | | | | | | | | |
| 9 | 75 | 66 | 60 | 56 | 74 | 65 | 59 | 56 | 64 | 59 | 55 | 63 | 59 | 55 | 62 | 58 | 55 | 54 | | | | | | | | | | | | | | | | | | | |
| 10 | 72 | 62 | 57 | 53 | 71 | 62 | 57 | 53 | 61 | 56 | 53 | 60 | 56 | 52 | 60 | 55 | 52 | 51 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 237344 |
| 5° | 215936 |
| 10° | 157552 |
| 15° | 89392 |
| 20° | 54949 |
| 25° | 44361 |
| 30° | 36197 |
| 35° | 29190 |
| 40° | 23124 |
| 45° | 18164 |
| 50° | 14197 |
| 55° | 11120 |
| 60° | 8857 |
| 65° | 7341 |
| 70° | 5170 |
| 75° | 2745 |
| 80° | 2046 |
| 85° | 996 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18164 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 235.3 | 19.2 |
| 10°-20° | 315.2 | 25.7 |
| 20°-30° | 234.9 | 19.1 |
| 30°-40° | 190.1 | 15.5 |
| 40°-50° | 127.1 | 10.4 |
| 50°-60° | 73.6 | 6.0 |
| 60°-70° | 38.8 | 3.2 |
| 70°-80° | 11.2 | 0.9 |
| 80°-90° | 1.5 | 0.1 |
| 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° | 785.4 | 64.0 |
| 0°-40° | 975.5 | 79.5 |
| 0°-60° | 1176.2 | 95.8 |
| 0°-90° | 1227.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1227.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3007 | |
| 5° | 2725 | 235 |
| 15° | 1094 | 315 |
| 25° | 509 | 235 |
| 35° | 303 | 190 |
| 45° | 163 | 127 |
| 55° | 81 | 74 |
| 65° | 39 | 39 |
| 75° | 9 | 11 |
| 85° | 1 | 2 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 3006.6 |
| 2.5° | 2940.4 |
| 5° | 2725.0 |
| 7.5° | 2378.4 |
| 10° | 1965.5 |
| 12.5° | 1506.7 |
| 15° | 1093.8 |
| 17.5° | 811.1 |
| 20° | 654.1 |
| 22.5° | 572.2 |
| 25° | 509.3 |
| 27.5° | 452.1 |
| 30° | 397.1 |
| 32.5° | 348.9 |
| 35° | 302.9 |
| 37.5° | 261.4 |
| 40° | 224.4 |
| 42.5° | 191.8 |
| 45° | 162.7 |
| 47.5° | 138.0 |
| 50° | 115.6 |
| 52.5° | 96.5 |
| 55° | 80.8 |
| 57.5° | 67.3 |
| 60° | 56.1 |
| 62.5° | 47.1 |
| 65° | 39.3 |
| 67.5° | 31.4 |
| 70° | 22.4 |
| 72.5° | 14.6 |
| 75° | 9.0 |
| 77.5° | 5.6 |
| 80° | 4.5 |
| 82.5° | 2.2 |
| 85° | 1.1 |
| 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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