

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: P641094

Luminaire Tested: ML5612LSNFL2597FS1E - 692H - 900LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P641094
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSNFL2597FS1E - 692H - 900LM - 4000K
Description: ML56 RR, 25D TIR OPTIC, 6" HAZE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1315.9 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

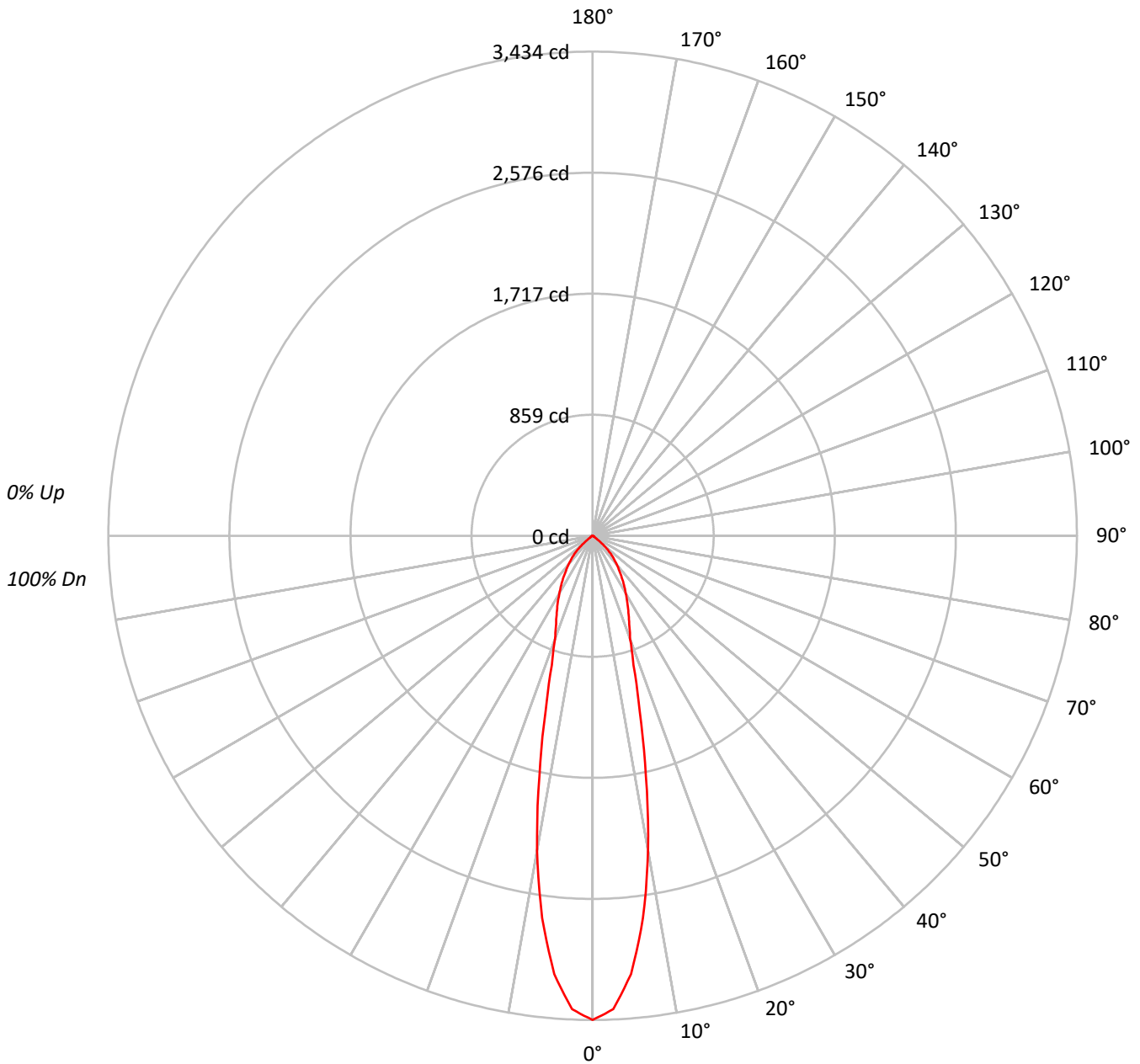
Input Watts (W): 13.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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 | 114 | 111 | 109 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 94 | | | | | | | | | | | | | | | | | | | |
| 2 | 108 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 99 | 96 | 93 | 96 | 93 | 91 | 93 | 91 | 89 | 88 | | | | | | | | | | | | | | | | | | | |
| 3 | 103 | 97 | 92 | 88 | 101 | 96 | 91 | 88 | 93 | 89 | 86 | 91 | 87 | 85 | 88 | 86 | 84 | 82 | | | | | | | | | | | | | | | | | | | |
| 4 | 98 | 91 | 86 | 82 | 96 | 90 | 85 | 81 | 88 | 84 | 80 | 86 | 82 | 79 | 84 | 81 | 78 | 77 | | | | | | | | | | | | | | | | | | | |
| 5 | 94 | 86 | 80 | 76 | 92 | 85 | 79 | 76 | 83 | 78 | 75 | 81 | 77 | 74 | 80 | 76 | 74 | 72 | | | | | | | | | | | | | | | | | | | |
| 6 | 89 | 81 | 75 | 71 | 88 | 80 | 75 | 71 | 79 | 74 | 70 | 77 | 73 | 70 | 76 | 72 | 69 | 68 | | | | | | | | | | | | | | | | | | | |
| 7 | 85 | 77 | 71 | 67 | 84 | 76 | 70 | 67 | 75 | 70 | 66 | 73 | 69 | 66 | 72 | 69 | 66 | 64 | | | | | | | | | | | | | | | | | | | |
| 8 | 82 | 73 | 67 | 63 | 81 | 72 | 67 | 63 | 71 | 66 | 63 | 70 | 66 | 62 | 69 | 65 | 62 | 61 | | | | | | | | | | | | | | | | | | | |
| 9 | 78 | 69 | 64 | 60 | 77 | 69 | 63 | 60 | 68 | 63 | 60 | 67 | 63 | 59 | 66 | 62 | 59 | 58 | | | | | | | | | | | | | | | | | | | |
| 10 | 75 | 66 | 61 | 57 | 74 | 66 | 60 | 57 | 65 | 60 | 57 | 64 | 60 | 57 | 63 | 59 | 56 | 55 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 188252 |
| 5° | 171698 |
| 10° | 126172 |
| 15° | 72946 |
| 20° | 45306 |
| 25° | 36395 |
| 30° | 29764 |
| 35° | 24079 |
| 40° | 19000 |
| 45° | 14335 |
| 50° | 7403 |
| 55° | 2131 |
| 60° | 1360 |
| 65° | 804 |
| 70° | 401 |
| 75° | 254 |
| 80° | 379 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14335 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 270.1 | 20.5 |
| 10°-20° | 368.9 | 28.0 |
| 20°-30° | 277.7 | 21.1 |
| 30°-40° | 225.6 | 17.1 |
| 40°-50° | 137.7 | 10.5 |
| 50°-60° | 28.4 | 2.2 |
| 60°-70° | 6.1 | 0.5 |
| 70°-80° | 1.4 | 0.1 |
| 80°-90° | 0.2 | 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° | 916.7 | 69.7 |
| 0°-40° | 1142.2 | 86.8 |
| 0°-60° | 1308.2 | 99.4 |
| 0°-90° | 1315.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1315.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3434 | |
| 5° | 3120 | 270 |
| 15° | 1285 | 369 |
| 25° | 602 | 278 |
| 35° | 360 | 226 |
| 45° | 185 | 138 |
| 55° | 22 | 28 |
| 65° | 6 | 6 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 3434.0 |
| 2.5° | 3360.8 |
| 5° | 3120.1 |
| 7.5° | 2735.6 |
| 10° | 2266.6 |
| 12.5° | 1745.5 |
| 15° | 1285.3 |
| 17.5° | 962.7 |
| 20° | 776.6 |
| 22.5° | 676.1 |
| 25° | 601.7 |
| 27.5° | 533.5 |
| 30° | 470.2 |
| 32.5° | 414.4 |
| 35° | 359.8 |
| 37.5° | 310.2 |
| 40° | 265.5 |
| 42.5° | 225.8 |
| 45° | 184.9 |
| 47.5° | 134.0 |
| 50° | 86.8 |
| 52.5° | 40.9 |
| 55° | 22.3 |
| 57.5° | 16.1 |
| 60° | 12.4 |
| 62.5° | 8.7 |
| 65° | 6.2 |
| 67.5° | 2.5 |
| 70° | 2.5 |
| 72.5° | 1.2 |
| 75° | 1.2 |
| 77.5° | 1.2 |
| 80° | 1.2 |
| 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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