

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: P642154

Luminaire Tested: ML5612LSWFL5597FS1E - 692W - 600LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P642154
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-62)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSWFL5597FS1E - 692W - 600LM - 4000K
Description: ML56 RR, 55D TIR OPTIC, 6" WHITE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

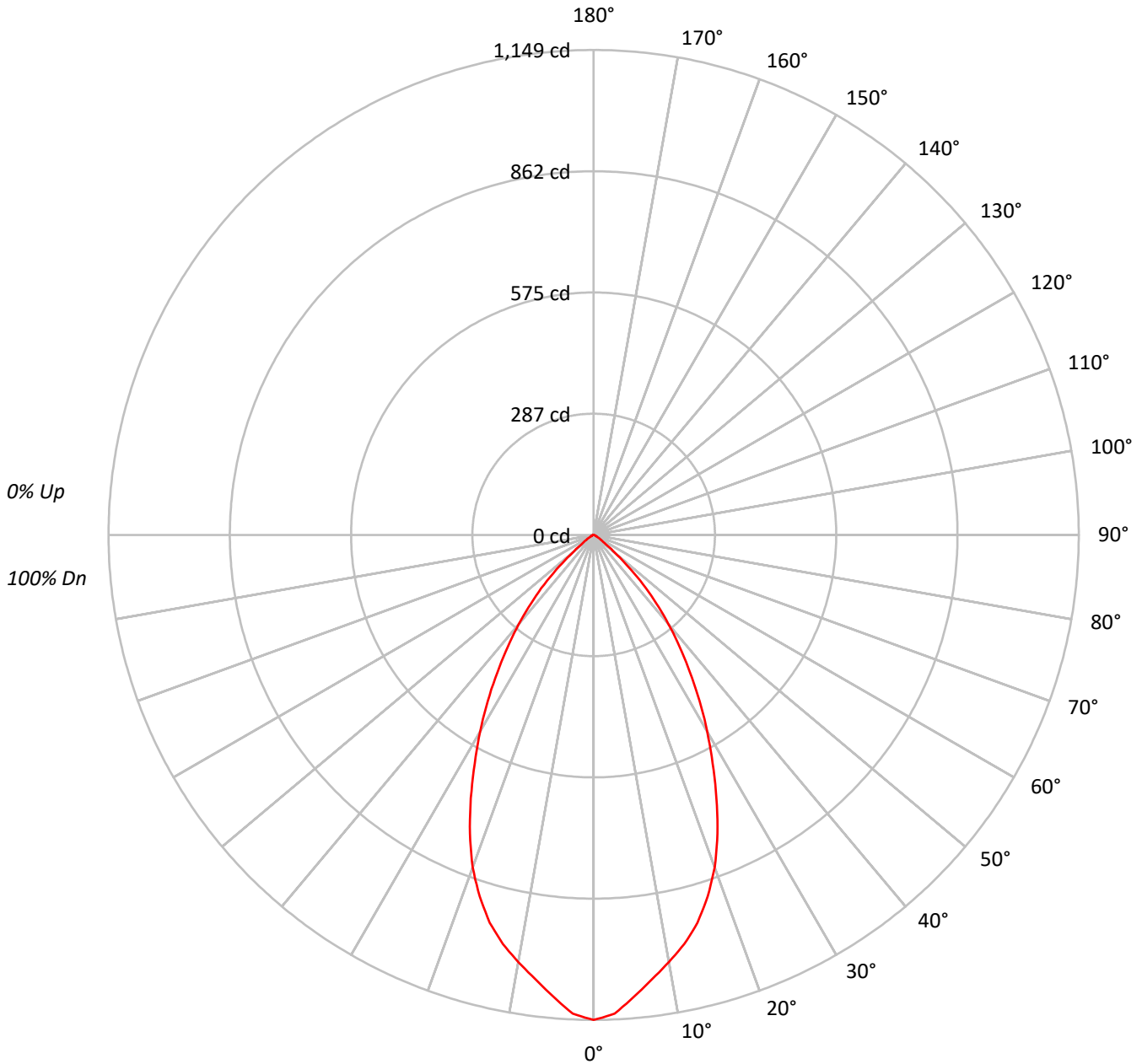
Lumens per Lamp: N/A
Luminaire Lumens: 1092.4 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10.3
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 | | | | 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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 100 | 100 |
| 1 | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 96 | 95 | 93 | 93 | 93 | 93 |
| 2 | 107 | 102 | 98 | 94 | 105 | 100 | 96 | 93 | 97 | 94 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | 85 | 85 | 85 | 85 |
| 3 | 101 | 94 | 89 | 85 | 99 | 93 | 88 | 84 | 90 | 86 | 83 | 88 | 84 | 81 | 85 | 83 | 80 | 79 | 79 | 79 | 79 |
| 4 | 96 | 88 | 82 | 77 | 94 | 86 | 81 | 77 | 84 | 79 | 76 | 82 | 78 | 75 | 80 | 77 | 74 | 72 | 72 | 72 | 72 |
| 5 | 90 | 81 | 75 | 71 | 89 | 80 | 75 | 70 | 79 | 73 | 70 | 77 | 72 | 69 | 75 | 71 | 68 | 67 | 67 | 67 | 67 |
| 6 | 85 | 76 | 70 | 65 | 84 | 75 | 69 | 65 | 74 | 68 | 64 | 72 | 67 | 64 | 71 | 67 | 63 | 62 | 62 | 62 | 62 |
| 7 | 81 | 71 | 65 | 60 | 79 | 70 | 64 | 60 | 69 | 63 | 60 | 68 | 63 | 59 | 67 | 62 | 59 | 57 | 57 | 57 | 57 |
| 8 | 77 | 66 | 60 | 56 | 75 | 66 | 60 | 56 | 65 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 55 | 53 | 53 | 53 | 53 |
| 9 | 73 | 62 | 56 | 52 | 71 | 62 | 56 | 52 | 61 | 55 | 52 | 60 | 55 | 51 | 59 | 55 | 51 | 50 | 50 | 50 | 50 |
| 10 | 69 | 59 | 53 | 49 | 68 | 58 | 52 | 48 | 57 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 48 | 47 | 47 | 47 | 47 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 62994 |
| 5° | 60417 |
| 10° | 57191 |
| 15° | 53973 |
| 20° | 48882 |
| 25° | 41621 |
| 30° | 34018 |
| 35° | 26582 |
| 40° | 19708 |
| 45° | 12885 |
| 50° | 5526 |
| 55° | 2313 |
| 60° | 1272 |
| 65° | 752 |
| 70° | 625 |
| 75° | 614 |
| 80° | 600 |
| 85° | 629 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12885 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 102.6 | 9.4 |
| 10°-20° | 264.7 | 24.2 |
| 20°-30° | 314.3 | 28.8 |
| 30°-40° | 248.8 | 22.8 |
| 40°-50° | 126.5 | 11.6 |
| 50°-60° | 25.7 | 2.4 |
| 60°-70° | 6.2 | 0.6 |
| 70°-80° | 2.8 | 0.3 |
| 80°-90° | 0.8 | 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° | 681.6 | 62.4 |
| 0°-40° | 930.5 | 85.2 |
| 0°-60° | 1082.6 | 99.1 |
| 0°-90° | 1092.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1092.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1149 | |
| 5° | 1098 | 103 |
| 15° | 951 | 265 |
| 25° | 688 | 314 |
| 35° | 397 | 249 |
| 45° | 166 | 126 |
| 55° | 24 | 26 |
| 65° | 6 | 6 |
| 75° | 3 | 3 |
| 85° | 1 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1149.1 |
| 2.5° | 1135.6 |
| 5° | 1097.9 |
| 7.5° | 1061.2 |
| 10° | 1027.4 |
| 12.5° | 992.6 |
| 15° | 951.0 |
| 17.5° | 897.8 |
| 20° | 837.9 |
| 22.5° | 766.4 |
| 25° | 688.1 |
| 27.5° | 609.8 |
| 30° | 537.4 |
| 32.5° | 466.8 |
| 35° | 397.2 |
| 37.5° | 334.4 |
| 40° | 275.4 |
| 42.5° | 219.4 |
| 45° | 166.2 |
| 47.5° | 109.2 |
| 50° | 64.8 |
| 52.5° | 36.7 |
| 55° | 24.2 |
| 57.5° | 17.4 |
| 60° | 11.6 |
| 62.5° | 7.7 |
| 65° | 5.8 |
| 67.5° | 3.9 |
| 70° | 3.9 |
| 72.5° | 2.9 |
| 75° | 2.9 |
| 77.5° | 1.9 |
| 80° | 1.9 |
| 82.5° | 1.0 |
| 85° | 1.0 |
| 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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