

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: P640996

Luminaire Tested: ML5612LSNFL2597FS1E - 593WB - 600LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640996
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSNFL2597FS1E - 593WB - 600LM - 2700K
Description: ML56 RR, 25D TIR OPTIC, 5" WHITE BAFFLE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

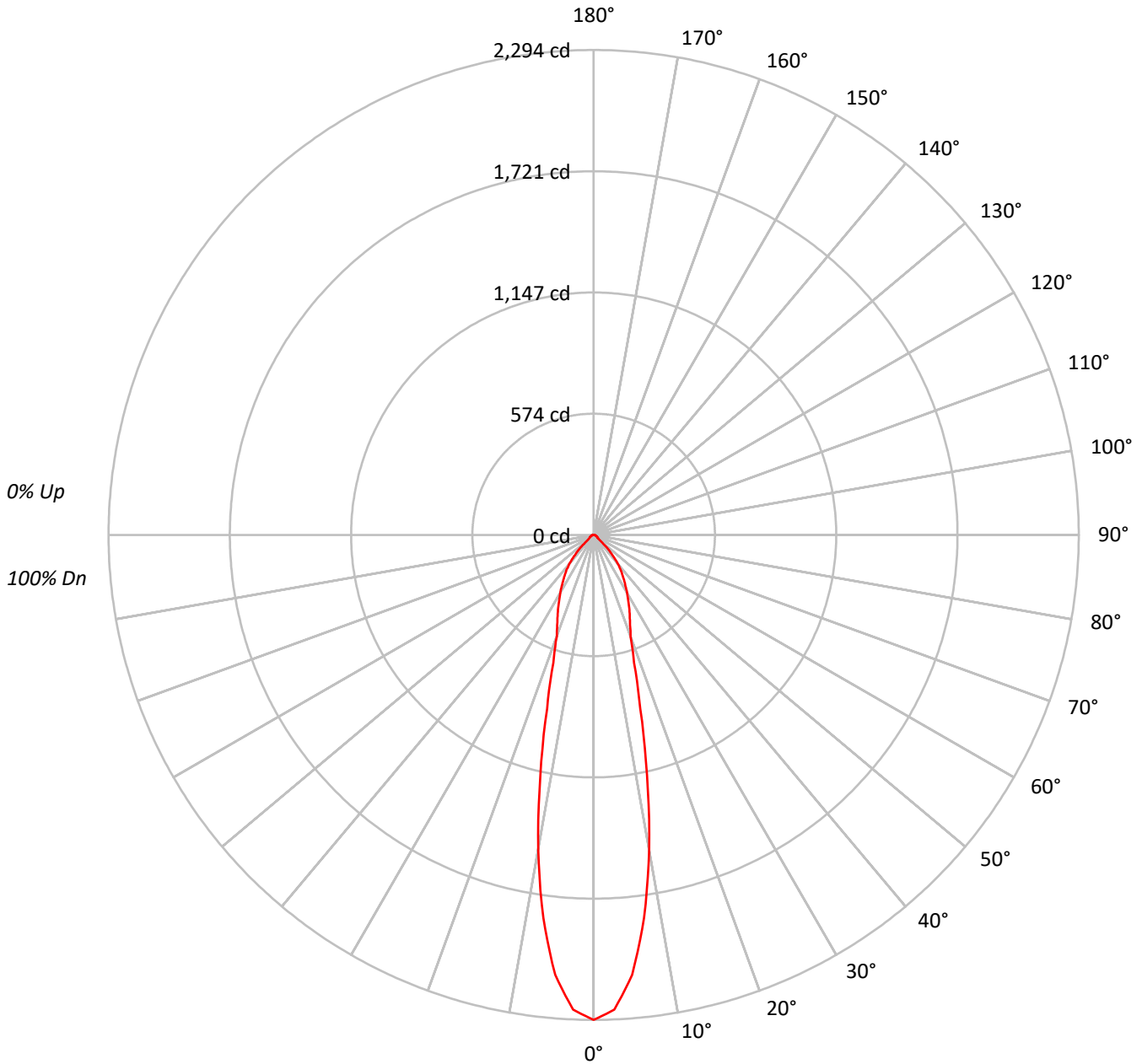
Lumens per Lamp: N/A
Luminaire Lumens: 887.9 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 10.3
Input Voltage (V): NR
Input Current (Ain): 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: P640996
CATALOG NUMBER: ML5612LSNFL2597FS1E - 593WB - 600LM - 2700K

Luminous Intensity Polar Plot





TEST NUMBER: P640996

CATALOG NUMBER: ML5612LSNFL2597FS1E - 593WB - 600LM - 2700K

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 | | | 100 | | | | | | | | | | | | | | | | |
| 1 | 113 | 110 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 93 | | | 93 | | | | | | | | | | | | | | | | |
| 2 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 86 | | | 86 | | | | | | | | | | | | | | | | |
| 3 | 102 | 96 | 91 | 87 | 100 | 94 | 90 | 86 | 92 | 88 | 85 | 89 | 86 | 83 | 87 | 84 | 82 | 81 | | | 81 | | | | | | | | | | | | | | | | |
| 4 | 97 | 90 | 84 | 80 | 96 | 89 | 84 | 80 | 87 | 82 | 79 | 85 | 81 | 78 | 83 | 80 | 77 | 75 | | | 75 | | | | | | | | | | | | | | | | |
| 5 | 93 | 85 | 79 | 75 | 91 | 84 | 78 | 74 | 82 | 77 | 74 | 80 | 76 | 73 | 79 | 75 | 72 | 71 | | | 71 | | | | | | | | | | | | | | | | |
| 6 | 89 | 80 | 74 | 70 | 87 | 79 | 74 | 70 | 78 | 73 | 69 | 76 | 72 | 69 | 75 | 71 | 68 | 67 | | | 67 | | | | | | | | | | | | | | | | |
| 7 | 85 | 76 | 70 | 66 | 83 | 75 | 69 | 65 | 74 | 69 | 65 | 72 | 68 | 65 | 71 | 67 | 64 | 63 | | | 63 | | | | | | | | | | | | | | | | |
| 8 | 81 | 72 | 66 | 62 | 80 | 71 | 66 | 62 | 70 | 65 | 62 | 69 | 65 | 61 | 68 | 64 | 61 | 60 | | | 60 | | | | | | | | | | | | | | | | |
| 9 | 78 | 68 | 63 | 59 | 77 | 68 | 62 | 59 | 67 | 62 | 59 | 66 | 62 | 58 | 65 | 61 | 58 | 57 | | | 57 | | | | | | | | | | | | | | | | |
| 10 | 74 | 65 | 60 | 56 | 74 | 65 | 60 | 56 | 64 | 59 | 56 | 63 | 59 | 56 | 63 | 58 | 56 | 54 | | | 54 | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° |
|-----|--------|
| 0° | 181106 |
| 5° | 165474 |
| 10° | 121208 |
| 15° | 69540 |
| 20° | 42894 |
| 25° | 34910 |
| 30° | 28704 |
| 35° | 23369 |
| 40° | 18415 |
| 45° | 11309 |
| 50° | 4176 |
| 55° | 3165 |
| 60° | 2952 |
| 65° | 2708 |
| 70° | 2747 |
| 75° | 2867 |
| 80° | 2728 |
| 85° | 3080 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11309 cd/sqm



TEST NUMBER: P640996

CATALOG NUMBER: ML5612LSNFL2597FS1E - 593WB - 600LM - 2700K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 180.5 | 20.3 |
| 10°-20° | 244.5 | 27.5 |
| 20°-30° | 184.5 | 20.8 |
| 30°-40° | 151.9 | 17.1 |
| 40°-50° | 77.4 | 8.7 |
| 50°-60° | 21.7 | 2.4 |
| 60°-70° | 14.7 | 1.7 |
| 70°-80° | 9.6 | 1.1 |
| 80°-90° | 3.2 | 0.4 |
| 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° | 609.5 | 68.6 |
| 0°-40° | 761.4 | 85.8 |
| 0°-60° | 860.4 | 96.9 |
| 0°-90° | 887.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 887.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2294 | |
| 5° | 2088 | 180 |
| 15° | 851 | 244 |
| 25° | 401 | 185 |
| 35° | 242 | 152 |
| 45° | 101 | 77 |
| 55° | 23 | 22 |
| 65° | 14 | 15 |
| 75° | 9 | 10 |
| 85° | 3 | 3 |
| 90° | 0 | |



TEST NUMBER: P640996

CATALOG NUMBER: ML5612LSNFL2597FS1E - 593WB - 600LM - 2700K

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2294.2 |
| 2.5° | 2247.4 |
| 5° | 2088.2 |
| 7.5° | 1827.0 |
| 10° | 1512.1 |
| 12.5° | 1162.4 |
| 15° | 850.9 |
| 17.5° | 634.0 |
| 20° | 510.6 |
| 22.5° | 447.6 |
| 25° | 400.8 |
| 27.5° | 355.7 |
| 30° | 314.9 |
| 32.5° | 276.6 |
| 35° | 242.5 |
| 37.5° | 211.9 |
| 40° | 178.7 |
| 42.5° | 137.9 |
| 45° | 101.3 |
| 47.5° | 62.1 |
| 50° | 34.0 |
| 52.5° | 26.4 |
| 55° | 23.0 |
| 57.5° | 21.3 |
| 60° | 18.7 |
| 62.5° | 17.0 |
| 65° | 14.5 |
| 67.5° | 12.8 |
| 70° | 11.9 |
| 72.5° | 10.2 |
| 75° | 9.4 |
| 77.5° | 7.7 |
| 80° | 6.0 |
| 82.5° | 4.3 |
| 85° | 3.4 |
| 87.5° | 0.9 |
| 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)