

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: P641057

Luminaire Tested: ML5612LSNFL2597FS1E - 596WB - 600LM - 3000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P641057
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSNFL2597FS1E - 596WB - 600LM - 3000K
Description: ML56 RR, 25D TIR OPTIC, 5" SHALLOW WHITE BAFFLE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

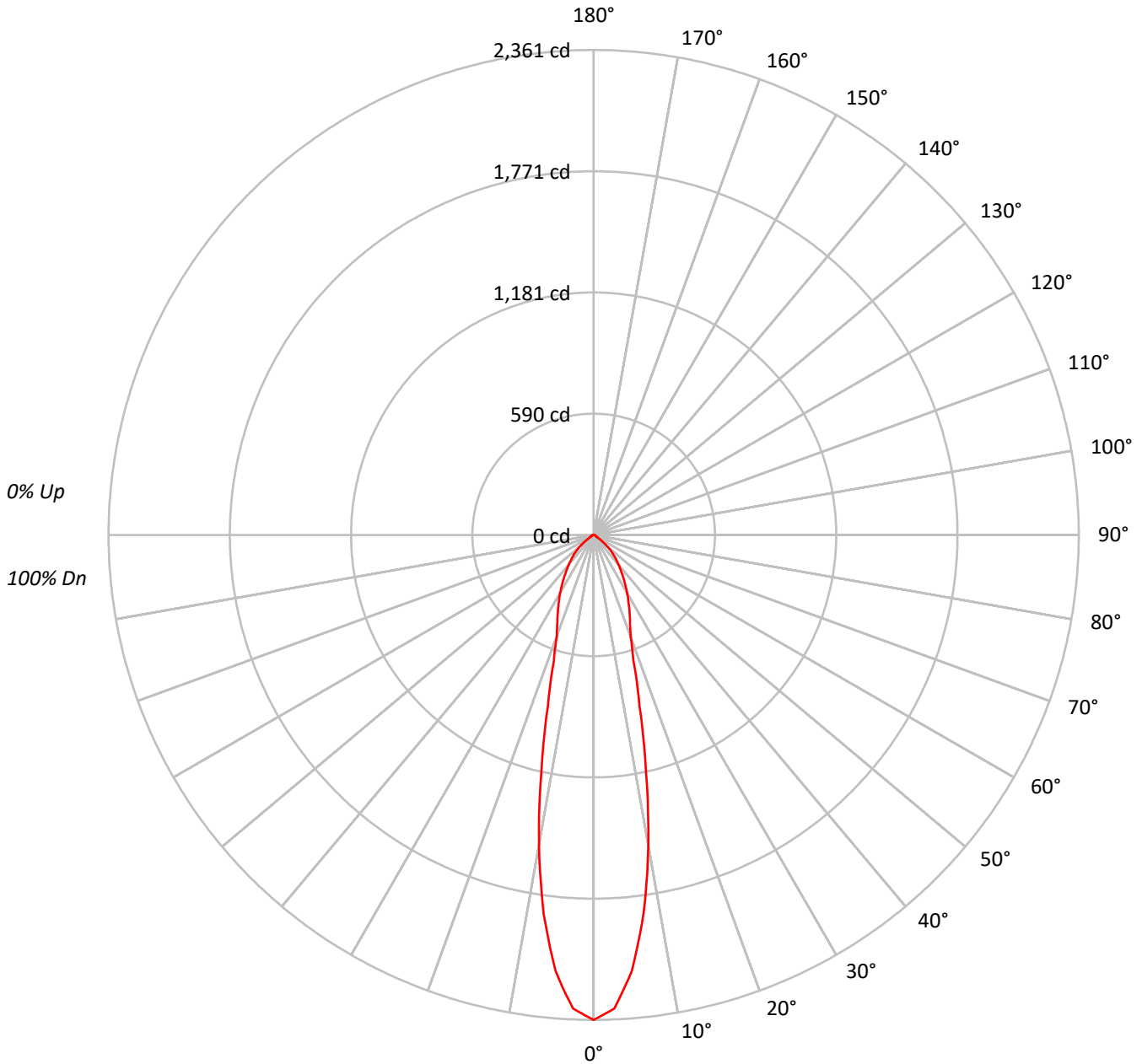
Lumens per Lamp: N/A
Luminaire Lumens: 942.0 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.44
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

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: P641057
CATALOG NUMBER: ML5612LSNFL2597FS1E - 596WB - 600LM - 3000K

Luminous Intensity Polar Plot





TEST NUMBER: P641057

CATALOG NUMBER: ML5612LSNFL2597FS1E - 596WB - 600LM - 3000K

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 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 93 | | | 93 | | | | | | | | | | | | | | | | |
| 2 | 107 | 102 | 98 | 95 | 105 | 101 | 97 | 94 | 97 | 94 | 92 | 94 | 92 | 90 | 92 | 90 | 88 | 86 | | | 86 | | | | | | | | | | | | | | | | |
| 3 | 102 | 95 | 90 | 86 | 100 | 94 | 89 | 86 | 91 | 87 | 84 | 89 | 86 | 83 | 87 | 84 | 82 | 80 | | | 80 | | | | | | | | | | | | | | | | |
| 4 | 97 | 89 | 84 | 79 | 95 | 88 | 83 | 79 | 86 | 81 | 78 | 84 | 80 | 77 | 82 | 79 | 76 | 75 | | | 75 | | | | | | | | | | | | | | | | |
| 5 | 92 | 84 | 78 | 73 | 90 | 83 | 77 | 73 | 81 | 76 | 72 | 79 | 75 | 72 | 78 | 74 | 71 | 70 | | | 70 | | | | | | | | | | | | | | | | |
| 6 | 88 | 79 | 73 | 69 | 86 | 78 | 72 | 68 | 76 | 71 | 68 | 75 | 71 | 67 | 74 | 70 | 67 | 65 | | | 65 | | | | | | | | | | | | | | | | |
| 7 | 84 | 74 | 68 | 64 | 82 | 74 | 68 | 64 | 72 | 67 | 64 | 71 | 67 | 63 | 70 | 66 | 63 | 62 | | | 62 | | | | | | | | | | | | | | | | |
| 8 | 80 | 71 | 65 | 61 | 79 | 70 | 64 | 60 | 69 | 64 | 60 | 68 | 63 | 60 | 67 | 63 | 60 | 58 | | | 58 | | | | | | | | | | | | | | | | |
| 9 | 76 | 67 | 61 | 57 | 75 | 67 | 61 | 57 | 66 | 61 | 57 | 65 | 60 | 57 | 64 | 60 | 57 | 55 | | | 55 | | | | | | | | | | | | | | | | |
| 10 | 73 | 64 | 58 | 54 | 72 | 63 | 58 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | 61 | 57 | 54 | 53 | | | 53 | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 186411 |
| 5° | 168818 |
| 10° | 122939 |
| 15° | 70431 |
| 20° | 44028 |
| 25° | 35973 |
| 30° | 29670 |
| 35° | 24034 |
| 40° | 19291 |
| 45° | 15339 |
| 50° | 10316 |
| 55° | 4693 |
| 60° | 2621 |
| 65° | 2447 |
| 70° | 2008 |
| 75° | 1861 |
| 80° | 2000 |
| 85° | 2355 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15339 cd/sqm



TEST NUMBER: P641057

CATALOG NUMBER: ML5612LSNFL2597FS1E - 596WB - 600LM - 3000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 184.1 | 19.5 |
| 10°-20° | 248.1 | 26.3 |
| 20°-30° | 190.1 | 20.2 |
| 30°-40° | 156.6 | 16.6 |
| 40°-50° | 104.8 | 11.1 |
| 50°-60° | 36.4 | 3.9 |
| 60°-70° | 12.6 | 1.3 |
| 70°-80° | 6.8 | 0.7 |
| 80°-90° | 2.5 | 0.3 |
| 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° | 622.3 | 66.1 |
| 0°-40° | 778.9 | 82.7 |
| 0°-60° | 920.1 | 97.7 |
| 0°-90° | 942.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 942.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2361 | |
| 5° | 2130 | 184 |
| 15° | 862 | 248 |
| 25° | 413 | 190 |
| 35° | 249 | 157 |
| 45° | 137 | 105 |
| 55° | 34 | 36 |
| 65° | 13 | 13 |
| 75° | 6 | 7 |
| 85° | 3 | 3 |
| 90° | 0 | |



TEST NUMBER: P641057

CATALOG NUMBER: ML5612LSNFL2597FS1E - 596WB - 600LM - 3000K

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2361.4 |
| 2.5° | 2308.0 |
| 5° | 2130.4 |
| 7.5° | 1861.0 |
| 10° | 1533.7 |
| 12.5° | 1175.9 |
| 15° | 861.8 |
| 17.5° | 644.8 |
| 20° | 524.1 |
| 22.5° | 461.1 |
| 25° | 413.0 |
| 27.5° | 366.6 |
| 30° | 325.5 |
| 32.5° | 286.1 |
| 35° | 249.4 |
| 37.5° | 216.1 |
| 40° | 187.2 |
| 42.5° | 161.0 |
| 45° | 137.4 |
| 47.5° | 112.9 |
| 50° | 84.0 |
| 52.5° | 59.5 |
| 55° | 34.1 |
| 57.5° | 21.0 |
| 60° | 16.6 |
| 62.5° | 14.9 |
| 65° | 13.1 |
| 67.5° | 10.5 |
| 70° | 8.7 |
| 72.5° | 7.0 |
| 75° | 6.1 |
| 77.5° | 6.1 |
| 80° | 4.4 |
| 82.5° | 3.5 |
| 85° | 2.6 |
| 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)