

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: P640998

Luminaire Tested: ML5612LSNFL2597FS1E - 593WB - 600LM - 3500K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640998
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 - 3500K
Description: ML56 RR, 25D TIR OPTIC, 5" WHITE BAFFLE TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

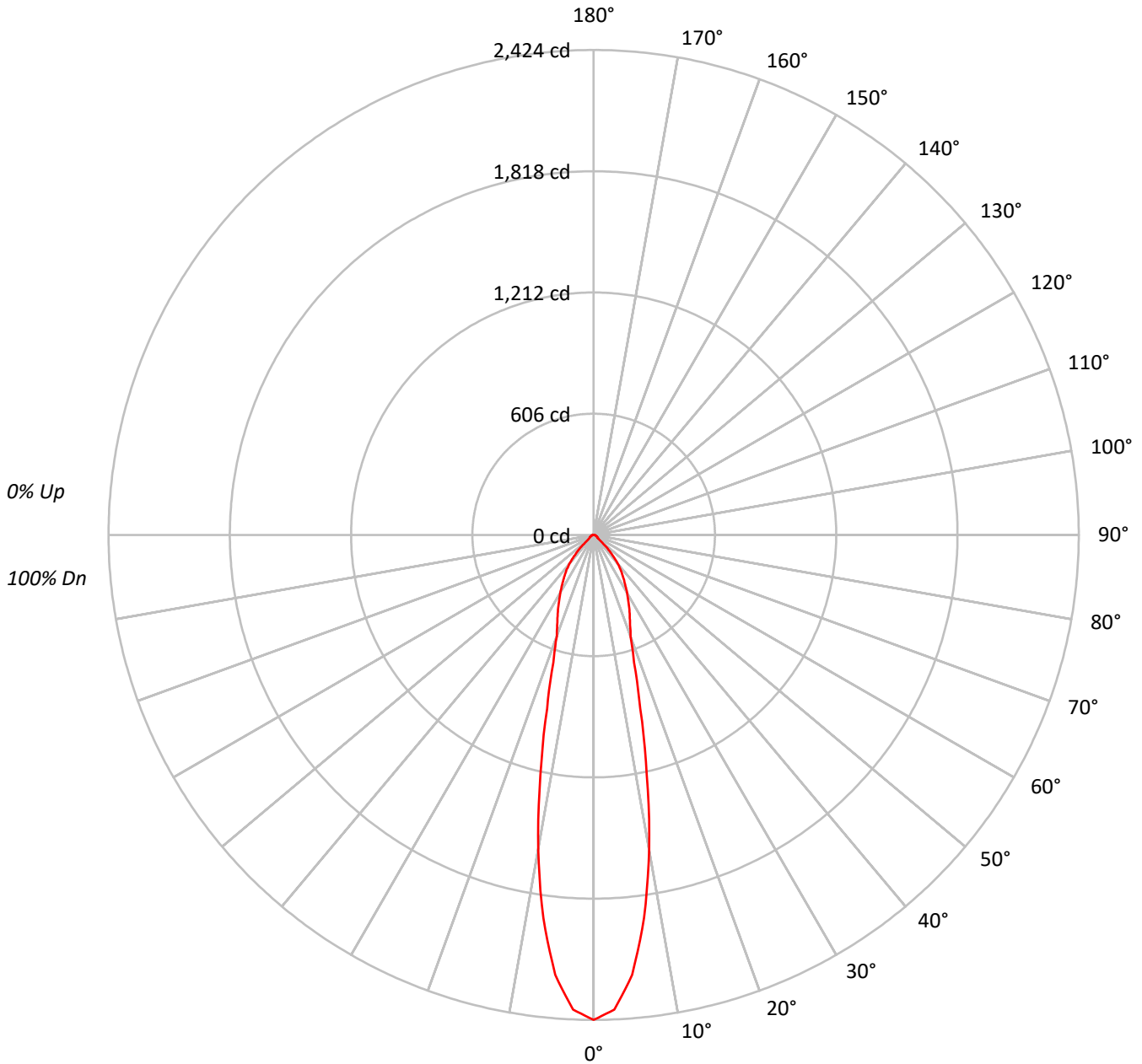
Lumens per Lamp: N/A
Luminaire Lumens: 938.1 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 10.3
Input Voltage (V): NR
Input Current (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 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 93 | | | | | | | | | | | | | | | | | | | |
| 2 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 86 | | | | | | | | | | | | | | | | | | | |
| 3 | 102 | 96 | 91 | 87 | 100 | 94 | 90 | 86 | 92 | 88 | 85 | 89 | 86 | 83 | 87 | 84 | 82 | 81 | | | | | | | | | | | | | | | | | | | |
| 4 | 97 | 90 | 84 | 80 | 96 | 89 | 84 | 80 | 87 | 82 | 79 | 85 | 81 | 78 | 83 | 80 | 77 | 75 | | | | | | | | | | | | | | | | | | | |
| 5 | 93 | 85 | 79 | 75 | 91 | 84 | 78 | 74 | 82 | 77 | 74 | 80 | 76 | 73 | 79 | 75 | 72 | 71 | | | | | | | | | | | | | | | | | | | |
| 6 | 89 | 80 | 74 | 70 | 87 | 79 | 74 | 70 | 78 | 73 | 69 | 76 | 72 | 69 | 75 | 71 | 68 | 67 | | | | | | | | | | | | | | | | | | | |
| 7 | 85 | 76 | 70 | 66 | 83 | 75 | 69 | 66 | 74 | 69 | 65 | 72 | 68 | 65 | 71 | 67 | 64 | 63 | | | | | | | | | | | | | | | | | | | |
| 8 | 81 | 72 | 66 | 62 | 80 | 71 | 66 | 62 | 70 | 65 | 62 | 69 | 65 | 61 | 68 | 64 | 61 | 60 | | | | | | | | | | | | | | | | | | | |
| 9 | 78 | 68 | 63 | 59 | 77 | 68 | 62 | 59 | 67 | 62 | 59 | 66 | 62 | 58 | 65 | 61 | 58 | 57 | | | | | | | | | | | | | | | | | | | |
| 10 | 74 | 65 | 60 | 56 | 74 | 65 | 60 | 56 | 64 | 59 | 56 | 63 | 59 | 56 | 63 | 58 | 56 | 54 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 191345 |
| 5° | 174841 |
| 10° | 128070 |
| 15° | 73480 |
| 20° | 45322 |
| 25° | 36888 |
| 30° | 30327 |
| 35° | 24690 |
| 40° | 19456 |
| 45° | 11945 |
| 50° | 4421 |
| 55° | 3344 |
| 60° | 3126 |
| 65° | 2858 |
| 70° | 2908 |
| 75° | 3020 |
| 80° | 2864 |
| 85° | 3261 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11945 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 190.7 | 20.3 |
| 10°-20° | 258.3 | 27.5 |
| 20°-30° | 194.9 | 20.8 |
| 30°-40° | 160.5 | 17.1 |
| 40°-50° | 81.7 | 8.7 |
| 50°-60° | 22.9 | 2.4 |
| 60°-70° | 15.6 | 1.7 |
| 70°-80° | 10.1 | 1.1 |
| 80°-90° | 3.3 | 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° | 644.0 | 68.6 |
| 0°-40° | 804.5 | 85.8 |
| 0°-60° | 909.1 | 96.9 |
| 0°-90° | 938.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 938.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2424 | |
| 5° | 2206 | 191 |
| 15° | 899 | 258 |
| 25° | 424 | 195 |
| 35° | 256 | 161 |
| 45° | 107 | 82 |
| 55° | 24 | 23 |
| 65° | 15 | 16 |
| 75° | 10 | 10 |
| 85° | 4 | 3 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2423.9 |
| 2.5° | 2374.5 |
| 5° | 2206.4 |
| 7.5° | 1930.3 |
| 10° | 1597.7 |
| 12.5° | 1228.1 |
| 15° | 899.1 |
| 17.5° | 669.8 |
| 20° | 539.5 |
| 22.5° | 472.9 |
| 25° | 423.5 |
| 27.5° | 375.8 |
| 30° | 332.7 |
| 32.5° | 292.2 |
| 35° | 256.2 |
| 37.5° | 223.9 |
| 40° | 188.8 |
| 42.5° | 145.7 |
| 45° | 107.0 |
| 47.5° | 65.6 |
| 50° | 36.0 |
| 52.5° | 27.9 |
| 55° | 24.3 |
| 57.5° | 22.5 |
| 60° | 19.8 |
| 62.5° | 18.0 |
| 65° | 15.3 |
| 67.5° | 13.5 |
| 70° | 12.6 |
| 72.5° | 10.8 |
| 75° | 9.9 |
| 77.5° | 8.1 |
| 80° | 6.3 |
| 82.5° | 4.5 |
| 85° | 3.6 |
| 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

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— 0°-180°

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Scaled Data Report



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