

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: P640765

Luminaire Tested: ML5612LSFL4097FS1E - 692SC - 900LM - 5000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 692SC - 900LM - 5000K
Description: ML56 RR, 40D TIR OPTIC, 6" SPECULAR CLEAR TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

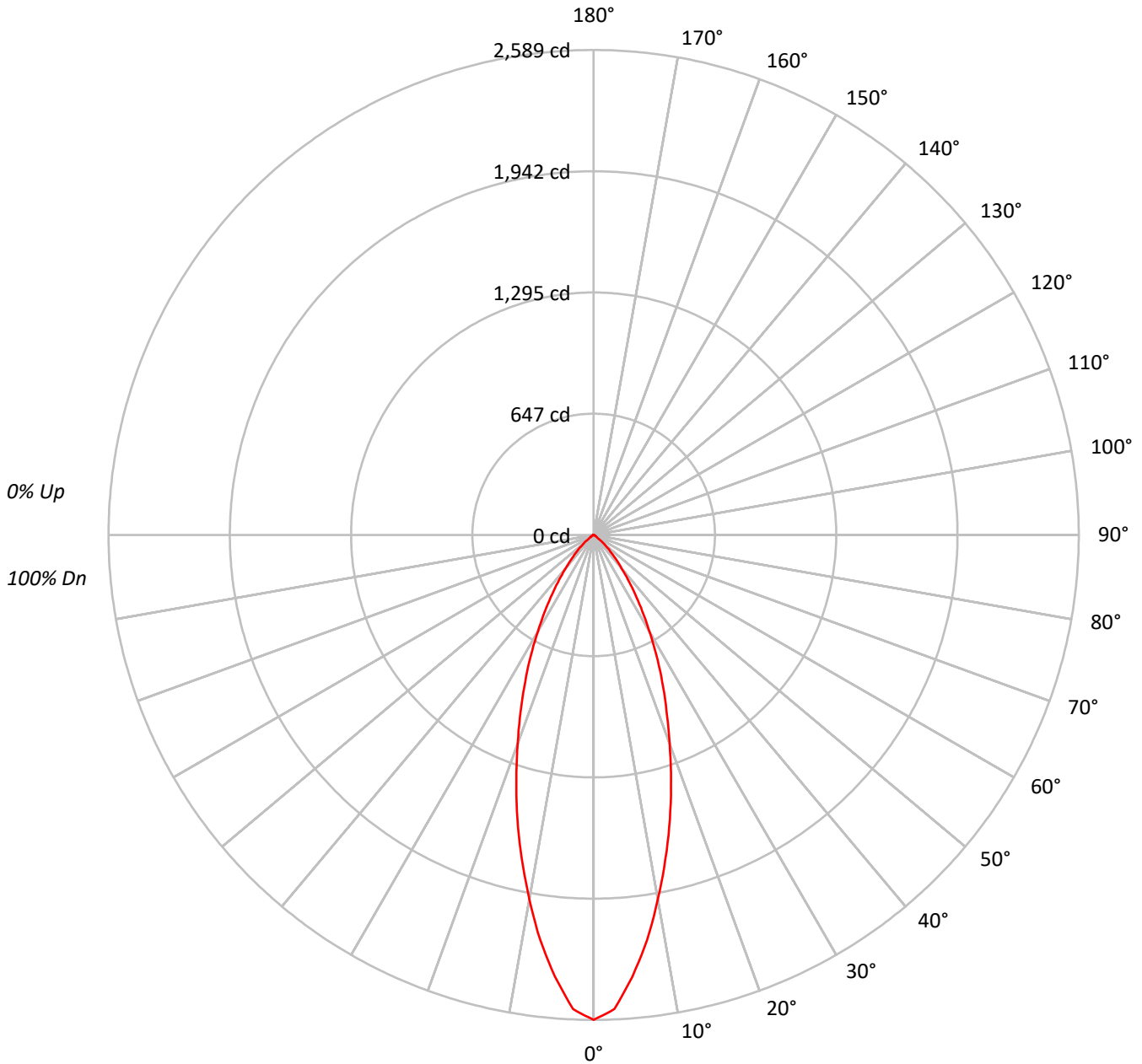
Lumens per Lamp: N/A
Luminaire Lumens: 1420.7 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.59 / 0.66
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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 | | | | 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 | | | |
| 1 | 114 | 111 | 109 | 107 | 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 | 88 | 85 | 88 | 86 | 84 | 82 | | | |
| 4 | 98 | 91 | 86 | 82 | 96 | 90 | 85 | 81 | 88 | 83 | 80 | 86 | 82 | 79 | 84 | 81 | 78 | 77 | | | |
| 5 | 94 | 86 | 80 | 76 | 92 | 85 | 79 | 75 | 83 | 78 | 75 | 81 | 77 | 74 | 80 | 76 | 73 | 72 | | | |
| 6 | 89 | 81 | 75 | 71 | 88 | 80 | 74 | 71 | 78 | 74 | 70 | 77 | 73 | 70 | 76 | 72 | 69 | 68 | | | |
| 7 | 85 | 76 | 70 | 66 | 84 | 76 | 70 | 66 | 74 | 69 | 66 | 73 | 69 | 66 | 72 | 68 | 65 | 64 | | | |
| 8 | 81 | 72 | 66 | 62 | 80 | 72 | 66 | 62 | 71 | 66 | 62 | 69 | 65 | 62 | 69 | 65 | 62 | 60 | | | |
| 9 | 78 | 68 | 63 | 59 | 77 | 68 | 63 | 59 | 67 | 62 | 59 | 66 | 62 | 59 | 65 | 61 | 58 | 57 | | | |
| 10 | 74 | 65 | 60 | 56 | 73 | 65 | 59 | 56 | 64 | 59 | 56 | 63 | 59 | 56 | 62 | 58 | 55 | 54 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 141924 |
| 5° | 130238 |
| 10° | 109912 |
| 15° | 89172 |
| 20° | 69073 |
| 25° | 52322 |
| 30° | 37708 |
| 35° | 25745 |
| 40° | 16517 |
| 45° | 10102 |
| 50° | 5296 |
| 55° | 2017 |
| 60° | 1228 |
| 65° | 480 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10102 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 213.8 | 15.1 |
| 10°-20° | 434.5 | 30.6 |
| 20°-30° | 396.6 | 27.9 |
| 30°-40° | 243.8 | 17.2 |
| 40°-50° | 104.7 | 7.4 |
| 50°-60° | 23.1 | 1.6 |
| 60°-70° | 4.1 | 0.3 |
| 70°-80° | 0.0 | 0.0 |
| 80°-90° | 0.0 | 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° | 1044.9 | 73.6 |
| 0°-40° | 1288.8 | 90.7 |
| 0°-60° | 1416.6 | 99.7 |
| 0°-90° | 1420.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1420.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2589 | |
| 5° | 2367 | 214 |
| 15° | 1571 | 434 |
| 25° | 865 | 397 |
| 35° | 385 | 244 |
| 45° | 130 | 105 |
| 55° | 21 | 23 |
| 65° | 4 | 4 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 2588.9 |
| 2.5° | 2534.3 |
| 5° | 2366.7 |
| 7.5° | 2183.0 |
| 10° | 1974.5 |
| 12.5° | 1771.0 |
| 15° | 1571.2 |
| 17.5° | 1371.4 |
| 20° | 1184.0 |
| 22.5° | 1016.4 |
| 25° | 865.0 |
| 27.5° | 724.8 |
| 30° | 595.7 |
| 32.5° | 482.8 |
| 35° | 384.7 |
| 37.5° | 300.3 |
| 40° | 230.8 |
| 42.5° | 177.5 |
| 45° | 130.3 |
| 47.5° | 95.6 |
| 50° | 62.1 |
| 52.5° | 31.0 |
| 55° | 21.1 |
| 57.5° | 16.1 |
| 60° | 11.2 |
| 62.5° | 7.4 |
| 65° | 3.7 |
| 67.5° | 0.0 |
| 70° | 0.0 |
| 72.5° | 0.0 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 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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