

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: P640574

Luminaire Tested: ML5612LSFL4097FS1E - 592SC - 1200LM - 4000K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640574
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-25)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5612LSFL4097FS1E - 592SC - 1200LM - 4000K
Description: ML56 RR, 40D TIR OPTIC, 5" SPECULAR CLEAR TRIM
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

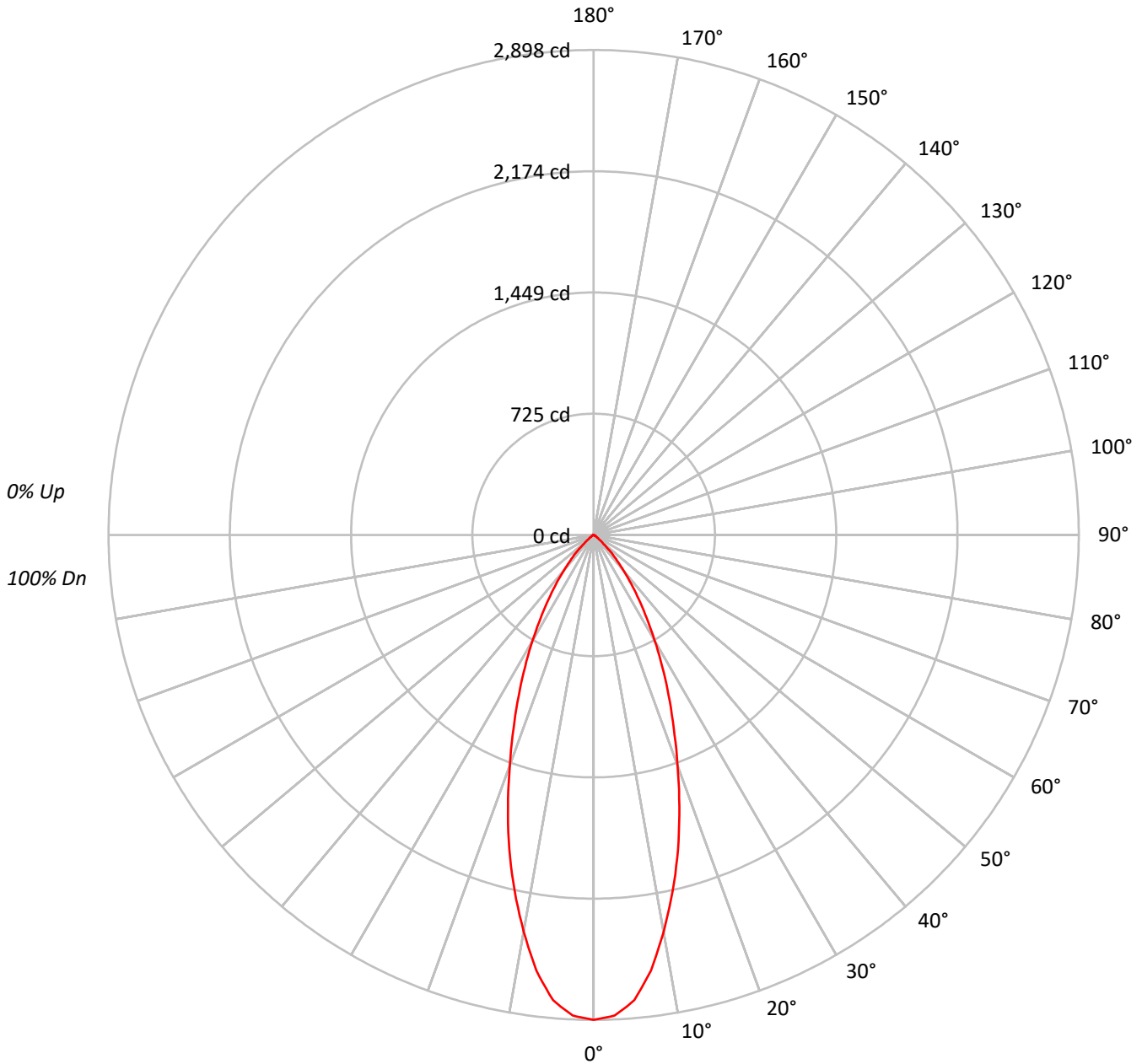
Lumens per Lamp: N/A
Luminaire Lumens: 1713.2 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.64 / 0.69
Luminous Opening: Circular (Dia: 0.42' x H: 0')
CIE Type: Direct

Input Watts (W): 16.5
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 | 114 | 111 | 109 | 107 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 94 | | | | | | | | | | | | | | | | | | | |
| 2 | 108 | 104 | 100 | 97 | 106 | 102 | 99 | 96 | 99 | 96 | 94 | 96 | 94 | 92 | 93 | 91 | 90 | 88 | | | | | | | | | | | | | | | | | | | |
| 3 | 103 | 97 | 92 | 89 | 101 | 96 | 91 | 88 | 93 | 90 | 87 | 91 | 88 | 85 | 89 | 86 | 84 | 82 | | | | | | | | | | | | | | | | | | | |
| 4 | 98 | 91 | 86 | 82 | 97 | 90 | 85 | 81 | 88 | 84 | 80 | 86 | 82 | 80 | 84 | 81 | 79 | 77 | | | | | | | | | | | | | | | | | | | |
| 5 | 94 | 86 | 80 | 76 | 92 | 85 | 80 | 76 | 83 | 79 | 75 | 81 | 78 | 75 | 80 | 77 | 74 | 72 | | | | | | | | | | | | | | | | | | | |
| 6 | 89 | 81 | 75 | 71 | 88 | 80 | 75 | 71 | 79 | 74 | 70 | 77 | 73 | 70 | 76 | 72 | 70 | 68 | | | | | | | | | | | | | | | | | | | |
| 7 | 85 | 77 | 71 | 67 | 84 | 76 | 70 | 67 | 75 | 70 | 66 | 73 | 69 | 66 | 72 | 69 | 66 | 64 | | | | | | | | | | | | | | | | | | | |
| 8 | 82 | 72 | 67 | 63 | 80 | 72 | 67 | 63 | 71 | 66 | 63 | 70 | 65 | 62 | 69 | 65 | 62 | 61 | | | | | | | | | | | | | | | | | | | |
| 9 | 78 | 69 | 63 | 59 | 77 | 68 | 63 | 59 | 67 | 63 | 59 | 67 | 62 | 59 | 66 | 62 | 59 | 57 | | | | | | | | | | | | | | | | | | | |
| 10 | 75 | 65 | 60 | 56 | 74 | 65 | 60 | 56 | 64 | 59 | 56 | 63 | 59 | 56 | 63 | 59 | 56 | 55 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 228763 |
| 5° | 221189 |
| 10° | 192918 |
| 15° | 159120 |
| 20° | 122919 |
| 25° | 92249 |
| 30° | 66414 |
| 35° | 45313 |
| 40° | 28328 |
| 45° | 16098 |
| 50° | 5723 |
| 55° | 3303 |
| 60° | 1895 |
| 65° | 560 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16098 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 253.8 | 14.8 |
| 10°-20° | 536.5 | 31.3 |
| 20°-30° | 486.5 | 28.4 |
| 30°-40° | 297.2 | 17.3 |
| 40°-50° | 112.4 | 6.6 |
| 50°-60° | 22.8 | 1.3 |
| 60°-70° | 4.0 | 0.2 |
| 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° | 1276.8 | 74.5 |
| 0°-40° | 1574.0 | 91.9 |
| 0°-60° | 1709.1 | 99.8 |
| 0°-90° | 1713.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1713.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2898 | |
| 5° | 2791 | 254 |
| 15° | 1947 | 537 |
| 25° | 1059 | 487 |
| 35° | 470 | 297 |
| 45° | 144 | 112 |
| 55° | 24 | 23 |
| 65° | 3 | 4 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2897.9 |
| 2.5° | 2875.4 |
| 5° | 2791.3 |
| 7.5° | 2624.5 |
| 10° | 2406.7 |
| 12.5° | 2179.8 |
| 15° | 1947.0 |
| 17.5° | 1702.1 |
| 20° | 1463.2 |
| 22.5° | 1248.4 |
| 25° | 1059.1 |
| 27.5° | 886.4 |
| 30° | 728.6 |
| 32.5° | 588.9 |
| 35° | 470.2 |
| 37.5° | 366.6 |
| 40° | 274.9 |
| 42.5° | 207.3 |
| 45° | 144.2 |
| 47.5° | 81.1 |
| 50° | 46.6 |
| 52.5° | 33.1 |
| 55° | 24.0 |
| 57.5° | 16.5 |
| 60° | 12.0 |
| 62.5° | 7.5 |
| 65° | 3.0 |
| 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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Scaled Data Report



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