

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: P640415

Luminaire Tested: ML5609LSVWFL75D2W1E - 691WB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640415
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-82)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSVWFL75D2W1E - 691WB - 900LM - 2700K
Description: ML56 RR, 75D TIR OPTIC, 6" DEADFRONT TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

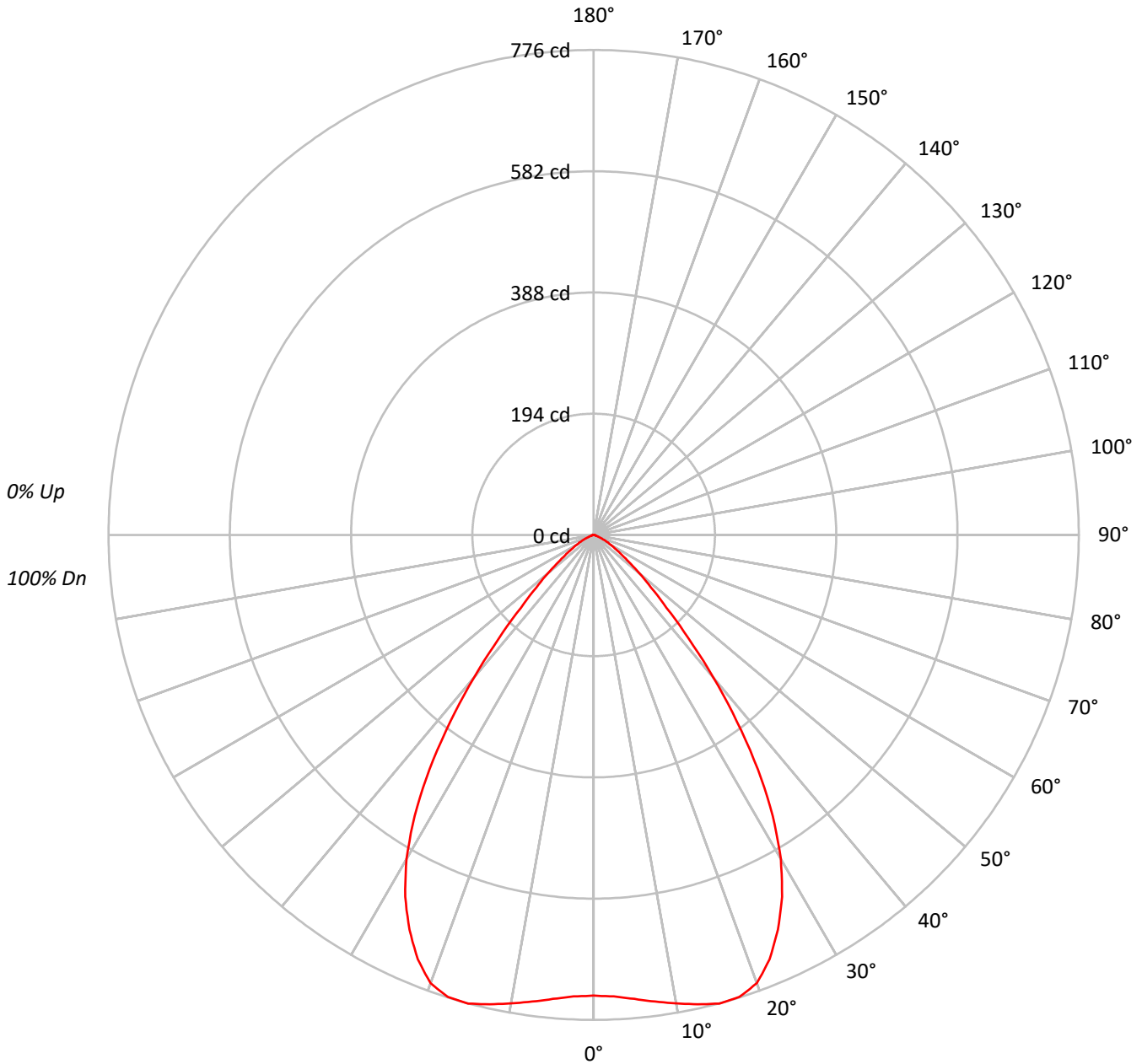
Lumens per Lamp: N/A
Luminaire Lumens: 1097.5 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.09
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 11.8
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 | 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 | 107 | 104 | 110 | 107 | 105 | 103 | 103 | 101 | 99 | 100 | 98 | 96 | 96 | 95 | 94 | 92 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 106 | 100 | 96 | 92 | 104 | 99 | 95 | 91 | 95 | 92 | 89 | 92 | 90 | 87 | 90 | 87 | 85 | 83 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 100 | 92 | 87 | 82 | 98 | 91 | 86 | 81 | 88 | 84 | 80 | 86 | 82 | 79 | 83 | 80 | 78 | 76 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 94 | 85 | 79 | 74 | 92 | 84 | 78 | 73 | 82 | 76 | 72 | 79 | 75 | 72 | 78 | 74 | 71 | 69 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 88 | 78 | 72 | 67 | 86 | 77 | 71 | 67 | 76 | 70 | 66 | 74 | 69 | 65 | 72 | 68 | 65 | 63 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 83 | 73 | 66 | 61 | 81 | 72 | 65 | 61 | 70 | 64 | 60 | 69 | 64 | 60 | 67 | 63 | 59 | 58 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 78 | 67 | 61 | 56 | 76 | 67 | 60 | 56 | 65 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 55 | 53 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 73 | 63 | 56 | 51 | 72 | 62 | 56 | 51 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 50 | 49 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 69 | 58 | 52 | 47 | 68 | 58 | 52 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 66 | 55 | 48 | 44 | 65 | 54 | 48 | 44 | 53 | 48 | 44 | 53 | 47 | 44 | 52 | 47 | 43 | 42 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 40408 |
| 5° | 41008 |
| 10° | 42373 |
| 15° | 44058 |
| 20° | 44524 |
| 25° | 42160 |
| 30° | 37886 |
| 35° | 30644 |
| 40° | 21276 |
| 45° | 12769 |
| 50° | 8136 |
| 55° | 5085 |
| 60° | 3410 |
| 65° | 2218 |
| 70° | 1122 |
| 75° | 635 |
| 80° | 631 |
| 85° | 629 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12769 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 71.7 | 6.5 |
| 10°-20° | 218.6 | 19.9 |
| 20°-30° | 317.8 | 29.0 |
| 30°-40° | 281.4 | 25.6 |
| 40°-50° | 135.3 | 12.3 |
| 50°-60° | 50.4 | 4.6 |
| 60°-70° | 17.3 | 1.6 |
| 70°-80° | 3.8 | 0.3 |
| 80°-90° | 1.4 | 0.1 |
| 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° | 608.0 | 55.4 |
| 0°-40° | 889.5 | 81.0 |
| 0°-60° | 1075.1 | 98.0 |
| 0°-90° | 1097.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1097.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 737 | |
| 5° | 745 | 72 |
| 15° | 776 | 219 |
| 25° | 697 | 318 |
| 35° | 458 | 281 |
| 45° | 165 | 135 |
| 55° | 53 | 50 |
| 65° | 17 | 17 |
| 75° | 3 | 4 |
| 85° | 1 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 737.1 |
| 2.5° | 739.1 |
| 5° | 745.2 |
| 7.5° | 753.2 |
| 10° | 761.2 |
| 12.5° | 769.3 |
| 15° | 776.3 |
| 17.5° | 775.3 |
| 20° | 763.2 |
| 22.5° | 735.1 |
| 25° | 697.0 |
| 27.5° | 652.8 |
| 30° | 598.5 |
| 32.5° | 533.3 |
| 35° | 457.9 |
| 37.5° | 376.6 |
| 40° | 297.3 |
| 42.5° | 224.0 |
| 45° | 164.7 |
| 47.5° | 124.5 |
| 50° | 95.4 |
| 52.5° | 70.3 |
| 55° | 53.2 |
| 57.5° | 40.2 |
| 60° | 31.1 |
| 62.5° | 24.1 |
| 65° | 17.1 |
| 67.5° | 10.0 |
| 70° | 7.0 |
| 72.5° | 4.0 |
| 75° | 3.0 |
| 77.5° | 3.0 |
| 80° | 2.0 |
| 82.5° | 2.0 |
| 85° | 1.0 |
| 87.5° | 1.0 |
| 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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