

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: P640527

Luminaire Tested: ML5609LSWFL55D2W1E - 696WB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P640527
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-69)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5609LSWFL55D2W1E - 696WB - 900LM - 2700K
Description: ML56 RR, 55D TIR OPTIC, 6" SHALLOW WHITE BAFFLE TRIM
Light Source: (1) D2W SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1139.7 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.89
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

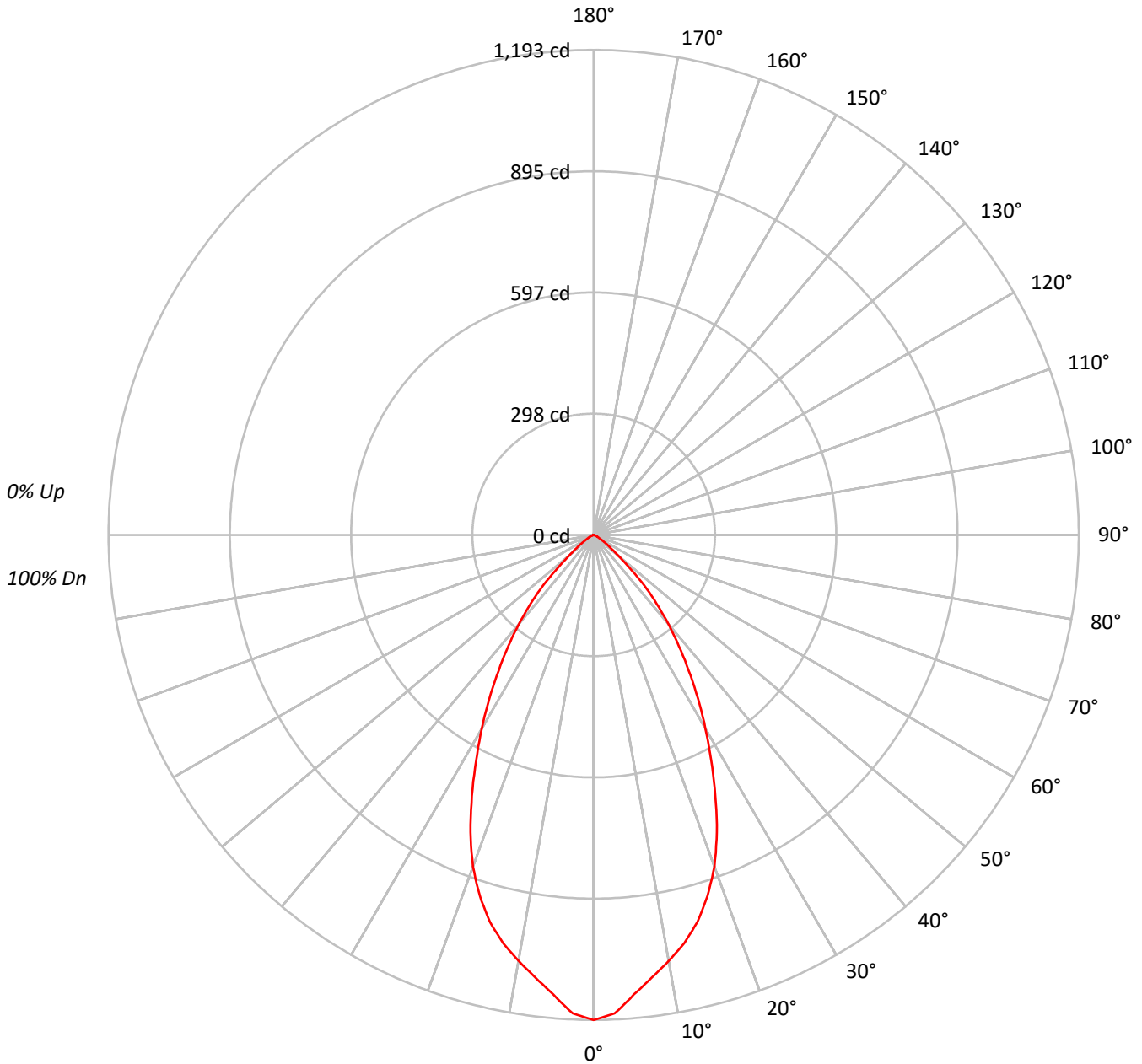
Input Watts (W): 11.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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 | 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 | 107 | 105 | 111 | 108 | 106 | 103 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 96 | 94 | 93 | | | 93 | | | | | | | | | | | | | | | | |
| 2 | 107 | 102 | 97 | 94 | 105 | 100 | 96 | 93 | 97 | 93 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | 85 | | | 85 | | | | | | | | | | | | | | | | |
| 3 | 101 | 94 | 89 | 84 | 99 | 93 | 88 | 84 | 90 | 86 | 82 | 88 | 84 | 81 | 85 | 82 | 80 | 78 | | | 78 | | | | | | | | | | | | | | | | |
| 4 | 95 | 87 | 81 | 77 | 93 | 86 | 81 | 76 | 84 | 79 | 75 | 82 | 78 | 74 | 80 | 76 | 74 | 72 | | | 72 | | | | | | | | | | | | | | | | |
| 5 | 90 | 81 | 75 | 70 | 88 | 80 | 74 | 70 | 78 | 73 | 69 | 77 | 72 | 69 | 75 | 71 | 68 | 66 | | | 66 | | | | | | | | | | | | | | | | |
| 6 | 85 | 76 | 69 | 65 | 84 | 75 | 69 | 64 | 73 | 68 | 64 | 72 | 67 | 63 | 70 | 66 | 63 | 61 | | | 61 | | | | | | | | | | | | | | | | |
| 7 | 80 | 71 | 64 | 60 | 79 | 70 | 64 | 59 | 69 | 63 | 59 | 67 | 62 | 59 | 66 | 62 | 58 | 57 | | | 57 | | | | | | | | | | | | | | | | |
| 8 | 76 | 66 | 60 | 55 | 75 | 65 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 55 | 62 | 58 | 54 | 53 | | | 53 | | | | | | | | | | | | | | | | |
| 9 | 72 | 62 | 56 | 52 | 71 | 62 | 56 | 51 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 49 | | | 49 | | | | | | | | | | | | | | | | |
| 10 | 69 | 58 | 52 | 48 | 68 | 58 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 48 | 56 | 51 | 48 | 46 | | | 46 | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° |
|-----|-------|
| 0° | 65422 |
| 5° | 62464 |
| 10° | 59217 |
| 15° | 55925 |
| 20° | 50632 |
| 25° | 42837 |
| 30° | 34784 |
| 35° | 27224 |
| 40° | 20417 |
| 45° | 13629 |
| 50° | 6593 |
| 55° | 3460 |
| 60° | 1765 |
| 65° | 1167 |
| 70° | 481 |
| 75° | 424 |
| 80° | 316 |
| 85° | 629 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13629 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 106.2 | 9.3 |
| 10°-20° | 274.3 | 24.1 |
| 20°-30° | 323.6 | 28.4 |
| 30°-40° | 255.3 | 22.4 |
| 40°-50° | 133.8 | 11.7 |
| 50°-60° | 35.0 | 3.1 |
| 60°-70° | 8.8 | 0.8 |
| 70°-80° | 2.1 | 0.2 |
| 80°-90° | 0.7 | 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° | 704.2 | 61.8 |
| 0°-40° | 959.4 | 84.2 |
| 0°-60° | 1128.2 | 99.0 |
| 0°-90° | 1139.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1139.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1193 | |
| 5° | 1135 | 106 |
| 15° | 985 | 274 |
| 25° | 708 | 324 |
| 35° | 407 | 255 |
| 45° | 176 | 134 |
| 55° | 36 | 35 |
| 65° | 9 | 9 |
| 75° | 2 | 2 |
| 85° | 1 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1193.4 |
| 2.5° | 1178.3 |
| 5° | 1135.1 |
| 7.5° | 1097.9 |
| 10° | 1063.8 |
| 12.5° | 1028.6 |
| 15° | 985.4 |
| 17.5° | 931.2 |
| 20° | 867.9 |
| 22.5° | 791.6 |
| 25° | 708.2 |
| 27.5° | 625.8 |
| 30° | 549.5 |
| 32.5° | 477.2 |
| 35° | 406.8 |
| 37.5° | 344.6 |
| 40° | 285.3 |
| 42.5° | 229.0 |
| 45° | 175.8 |
| 47.5° | 116.5 |
| 50° | 77.3 |
| 52.5° | 52.2 |
| 55° | 36.2 |
| 57.5° | 23.1 |
| 60° | 16.1 |
| 62.5° | 12.1 |
| 65° | 9.0 |
| 67.5° | 5.0 |
| 70° | 3.0 |
| 72.5° | 2.0 |
| 75° | 2.0 |
| 77.5° | 2.0 |
| 80° | 1.0 |
| 82.5° | 1.0 |
| 85° | 1.0 |
| 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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