

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: P643011

Luminaire Tested: ML5615LSNFL259FS1E - 694TBZB - 900LM - 2700K

Issue Date: 2/17/2023

Test Information

Test Method: LM-79-2019
Report Number: P643011
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/17/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML5615LSNFL259FS1E - 694TBZB - 900LM - 2700K
Description: ML56 RR, 25D TIR OPTIC, 6" TUSCON BRONZE GIMBAL TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

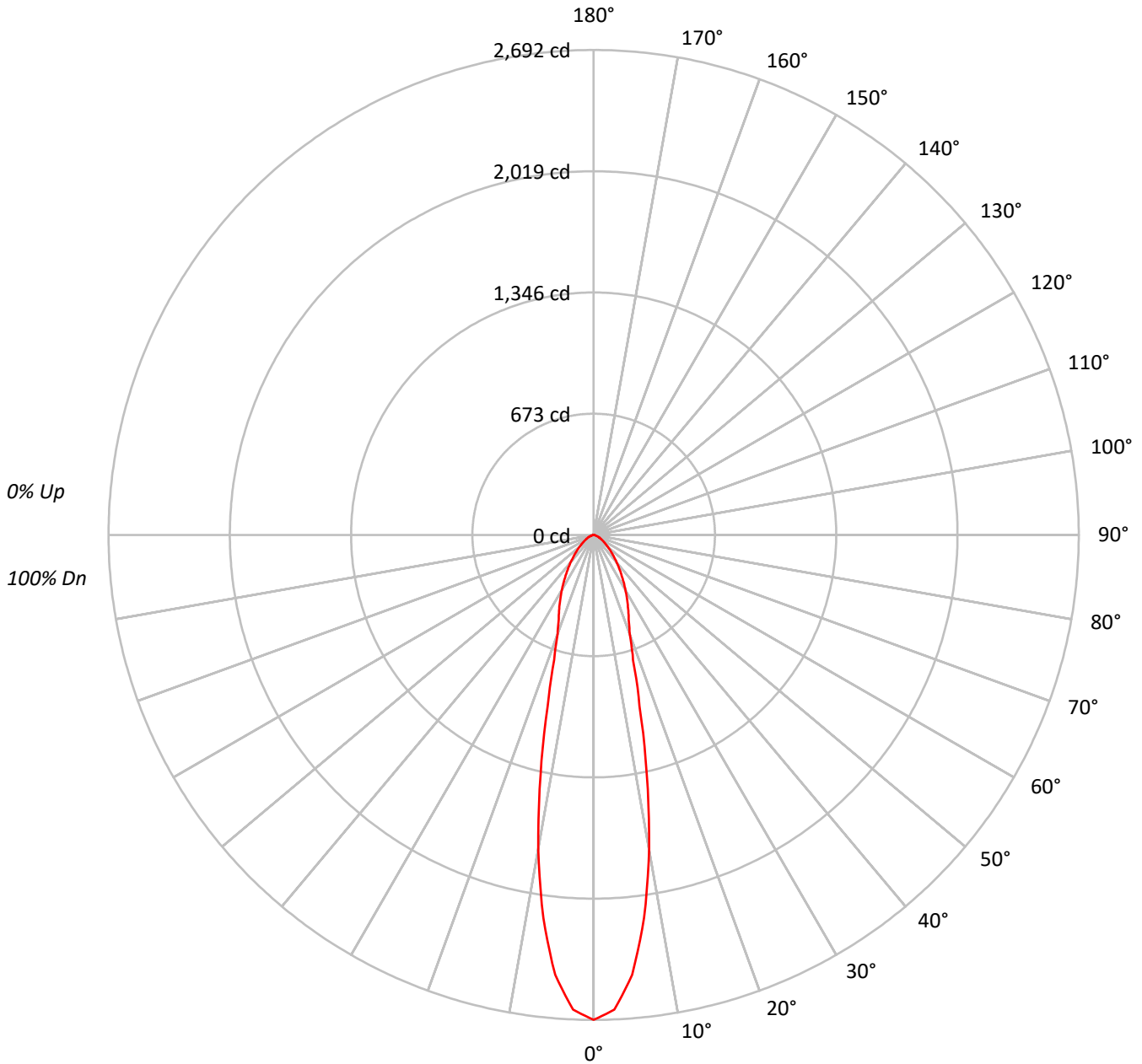
Lumens per Lamp: N/A
Luminaire Lumens: 1092.9 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.43
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10.5
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 | 113 | 110 | 107 | 105 | 111 | 108 | 106 | 103 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 95 | 94 | 93 | | | | | | | | | | | | | | | | | | | |
| 2 | 107 | 102 | 97 | 94 | 105 | 100 | 96 | 93 | 97 | 93 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | 85 | | | | | | | | | | | | | | | | | | | |
| 3 | 101 | 94 | 89 | 85 | 99 | 93 | 88 | 84 | 90 | 86 | 83 | 88 | 84 | 82 | 86 | 83 | 80 | 79 | | | | | | | | | | | | | | | | | | | |
| 4 | 96 | 88 | 82 | 78 | 94 | 87 | 81 | 77 | 85 | 80 | 76 | 83 | 79 | 75 | 81 | 77 | 75 | 73 | | | | | | | | | | | | | | | | | | | |
| 5 | 91 | 82 | 76 | 72 | 89 | 81 | 76 | 71 | 80 | 75 | 71 | 78 | 74 | 70 | 76 | 73 | 70 | 68 | | | | | | | | | | | | | | | | | | | |
| 6 | 87 | 77 | 71 | 67 | 85 | 77 | 71 | 67 | 75 | 70 | 66 | 74 | 69 | 66 | 72 | 68 | 65 | 64 | | | | | | | | | | | | | | | | | | | |
| 7 | 83 | 73 | 67 | 63 | 81 | 72 | 67 | 63 | 71 | 66 | 62 | 70 | 65 | 62 | 69 | 65 | 61 | 60 | | | | | | | | | | | | | | | | | | | |
| 8 | 79 | 69 | 63 | 59 | 78 | 69 | 63 | 59 | 68 | 62 | 59 | 67 | 62 | 58 | 66 | 61 | 58 | 57 | | | | | | | | | | | | | | | | | | | |
| 9 | 75 | 66 | 60 | 56 | 74 | 65 | 60 | 56 | 64 | 59 | 56 | 63 | 59 | 55 | 63 | 58 | 55 | 54 | | | | | | | | | | | | | | | | | | | |
| 10 | 72 | 63 | 57 | 53 | 71 | 62 | 57 | 53 | 62 | 56 | 53 | 61 | 56 | 53 | 60 | 56 | 53 | 51 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 147559 |
| 5° | 134855 |
| 10° | 98495 |
| 15° | 55857 |
| 20° | 34075 |
| 25° | 27346 |
| 30° | 22288 |
| 35° | 17875 |
| 40° | 14169 |
| 45° | 11086 |
| 50° | 8614 |
| 55° | 6786 |
| 60° | 5372 |
| 65° | 4410 |
| 70° | 3206 |
| 75° | 1906 |
| 80° | 947 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11086 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 211.7 | 19.4 |
| 10°-20° | 283.5 | 25.9 |
| 20°-30° | 208.6 | 19.1 |
| 30°-40° | 167.9 | 15.4 |
| 40°-50° | 111.6 | 10.2 |
| 50°-60° | 64.6 | 5.9 |
| 60°-70° | 33.9 | 3.1 |
| 70°-80° | 10.1 | 0.9 |
| 80°-90° | 0.9 | 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° | 703.8 | 64.4 |
| 0°-40° | 871.8 | 79.8 |
| 0°-60° | 1047.9 | 95.9 |
| 0°-90° | 1092.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1092.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2692 | |
| 5° | 2451 | 212 |
| 15° | 984 | 283 |
| 25° | 452 | 209 |
| 35° | 267 | 168 |
| 45° | 143 | 112 |
| 55° | 71 | 65 |
| 65° | 34 | 34 |
| 75° | 9 | 10 |
| 85° | 0 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2691.7 |
| 2.5° | 2637.7 |
| 5° | 2450.6 |
| 7.5° | 2143.5 |
| 10° | 1769.4 |
| 12.5° | 1360.3 |
| 15° | 984.2 |
| 17.5° | 727.2 |
| 20° | 584.1 |
| 22.5° | 508.1 |
| 25° | 452.1 |
| 27.5° | 401.1 |
| 30° | 352.1 |
| 32.5° | 308.1 |
| 35° | 267.1 |
| 37.5° | 231.1 |
| 40° | 198.0 |
| 42.5° | 168.0 |
| 45° | 143.0 |
| 47.5° | 121.0 |
| 50° | 101.0 |
| 52.5° | 85.0 |
| 55° | 71.0 |
| 57.5° | 59.0 |
| 60° | 49.0 |
| 62.5° | 41.0 |
| 65° | 34.0 |
| 67.5° | 28.0 |
| 70° | 20.0 |
| 72.5° | 13.0 |
| 75° | 9.0 |
| 77.5° | 5.0 |
| 80° | 3.0 |
| 82.5° | 2.0 |
| 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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