

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: P886042

Luminaire Tested: ML104LSFLD2W1E-TIR1D55WFL-TL1RDMWB-200LM-3500K

Issue Date: 6/19/2024

Test Information

Test Method: LM-79-2019
Report Number: P886042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-133)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/19/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML104LSFLD2W1E-TIR1D55WFL-TL1RDMWB-200LM-3500K
Description: 1IN ROUND ML FLEX, SELECTABLE CCT, WITH 55D TIR, MATTE WHITE BAFFLED TRIM
Light Source: (1) D2W LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 215.2 lumens
Efficiency: N/A
Efficacy: 67.3 lumens/watt
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.78
Luminous Opening: Circular (Dia: 0.08' x H: 0')
CIE Type: Direct

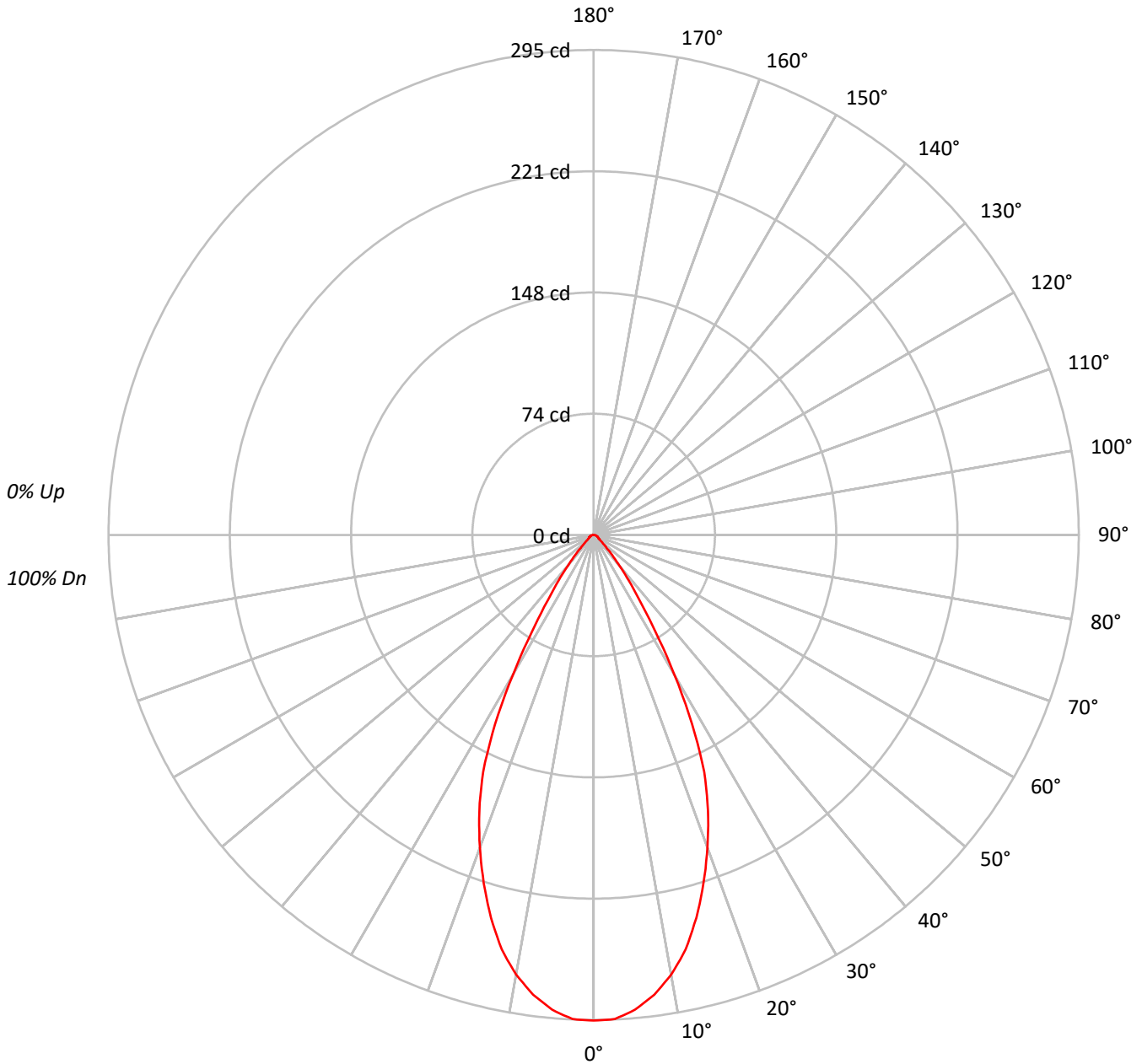
Input Watts (W): 3.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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 | 113 | 111 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 93 | | | |
| 2 | 108 | 103 | 99 | 96 | 106 | 101 | 98 | 95 | 98 | 95 | 92 | 95 | 93 | 90 | 92 | 90 | 89 | 87 | | | |
| 3 | 103 | 96 | 91 | 87 | 101 | 95 | 90 | 87 | 92 | 88 | 85 | 90 | 87 | 84 | 88 | 85 | 83 | 81 | | | |
| 4 | 98 | 90 | 85 | 81 | 96 | 89 | 84 | 80 | 87 | 83 | 79 | 85 | 81 | 78 | 83 | 80 | 77 | 76 | | | |
| 5 | 93 | 85 | 79 | 75 | 91 | 84 | 79 | 75 | 82 | 77 | 74 | 80 | 76 | 73 | 79 | 75 | 73 | 71 | | | |
| 6 | 89 | 80 | 74 | 70 | 87 | 79 | 74 | 70 | 78 | 73 | 69 | 76 | 72 | 69 | 75 | 71 | 68 | 67 | | | |
| 7 | 84 | 75 | 70 | 66 | 83 | 75 | 69 | 65 | 74 | 69 | 65 | 72 | 68 | 65 | 71 | 67 | 64 | 63 | | | |
| 8 | 81 | 71 | 66 | 62 | 79 | 71 | 65 | 62 | 70 | 65 | 61 | 69 | 64 | 61 | 68 | 64 | 61 | 59 | | | |
| 9 | 77 | 68 | 62 | 58 | 76 | 67 | 62 | 58 | 66 | 61 | 58 | 65 | 61 | 58 | 65 | 61 | 58 | 56 | | | |
| 10 | 74 | 64 | 59 | 55 | 73 | 64 | 59 | 55 | 63 | 58 | 55 | 62 | 58 | 55 | 62 | 58 | 55 | 53 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 582984 |
| 5° | 574315 |
| 10° | 544283 |
| 15° | 492606 |
| 20° | 424870 |
| 25° | 346450 |
| 30° | 223555 |
| 35° | 117571 |
| 40° | 62861 |
| 45° | 30980 |
| 50° | 18729 |
| 55° | 13419 |
| 60° | 13025 |
| 65° | 13075 |
| 70° | 12695 |
| 75° | 12963 |
| 80° | 12502 |
| 85° | 13586 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 30980 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 27.1 | 12.6 |
| 10°-20° | 66.9 | 31.1 |
| 20°-30° | 70.4 | 32.7 |
| 30°-40° | 32.8 | 15.3 |
| 40°-50° | 9.6 | 4.5 |
| 50°-60° | 3.6 | 1.7 |
| 60°-70° | 2.6 | 1.2 |
| 70°-80° | 1.6 | 0.8 |
| 80°-90° | 0.5 | 0.2 |
| 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° | 164.4 | 76.4 |
| 0°-40° | 197.3 | 91.6 |
| 0°-60° | 210.5 | 97.8 |
| 0°-90° | 215.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 215.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 295 | |
| 5° | 290 | 27 |
| 15° | 241 | 67 |
| 25° | 159 | 70 |
| 35° | 49 | 33 |
| 45° | 11 | 10 |
| 55° | 4 | 4 |
| 65° | 3 | 3 |
| 75° | 2 | 2 |
| 85° | 1 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 295.4 |
| 2.5° | 294.8 |
| 5° | 289.9 |
| 7.5° | 282.1 |
| 10° | 271.6 |
| 12.5° | 258.3 |
| 15° | 241.1 |
| 17.5° | 222.2 |
| 20° | 202.3 |
| 22.5° | 181.8 |
| 25° | 159.1 |
| 27.5° | 129.7 |
| 30° | 98.1 |
| 32.5° | 69.8 |
| 35° | 48.8 |
| 37.5° | 34.9 |
| 40° | 24.4 |
| 42.5° | 16.6 |
| 45° | 11.1 |
| 47.5° | 7.8 |
| 50° | 6.1 |
| 52.5° | 4.4 |
| 55° | 3.9 |
| 57.5° | 3.3 |
| 60° | 3.3 |
| 62.5° | 2.8 |
| 65° | 2.8 |
| 67.5° | 2.2 |
| 70° | 2.2 |
| 72.5° | 1.7 |
| 75° | 1.7 |
| 77.5° | 1.1 |
| 80° | 1.1 |
| 82.5° | 0.6 |
| 85° | 0.6 |
| 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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