

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: P886255

Luminaire Tested: ML204LSFL9FS1E-TIR1D25NFL-TL2RDMB-400LM-2700K

Issue Date: 7/18/2024

Test Information

Test Method: LM-79-2019
Report Number: P886255
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-73)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 7/18/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D25NFL-TL2RDMB-400LM-2700K
Description: 2IN ROUND ML FLEX, SELECTABLE CCT, WITH 25D TIR, MATTE BLACK TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

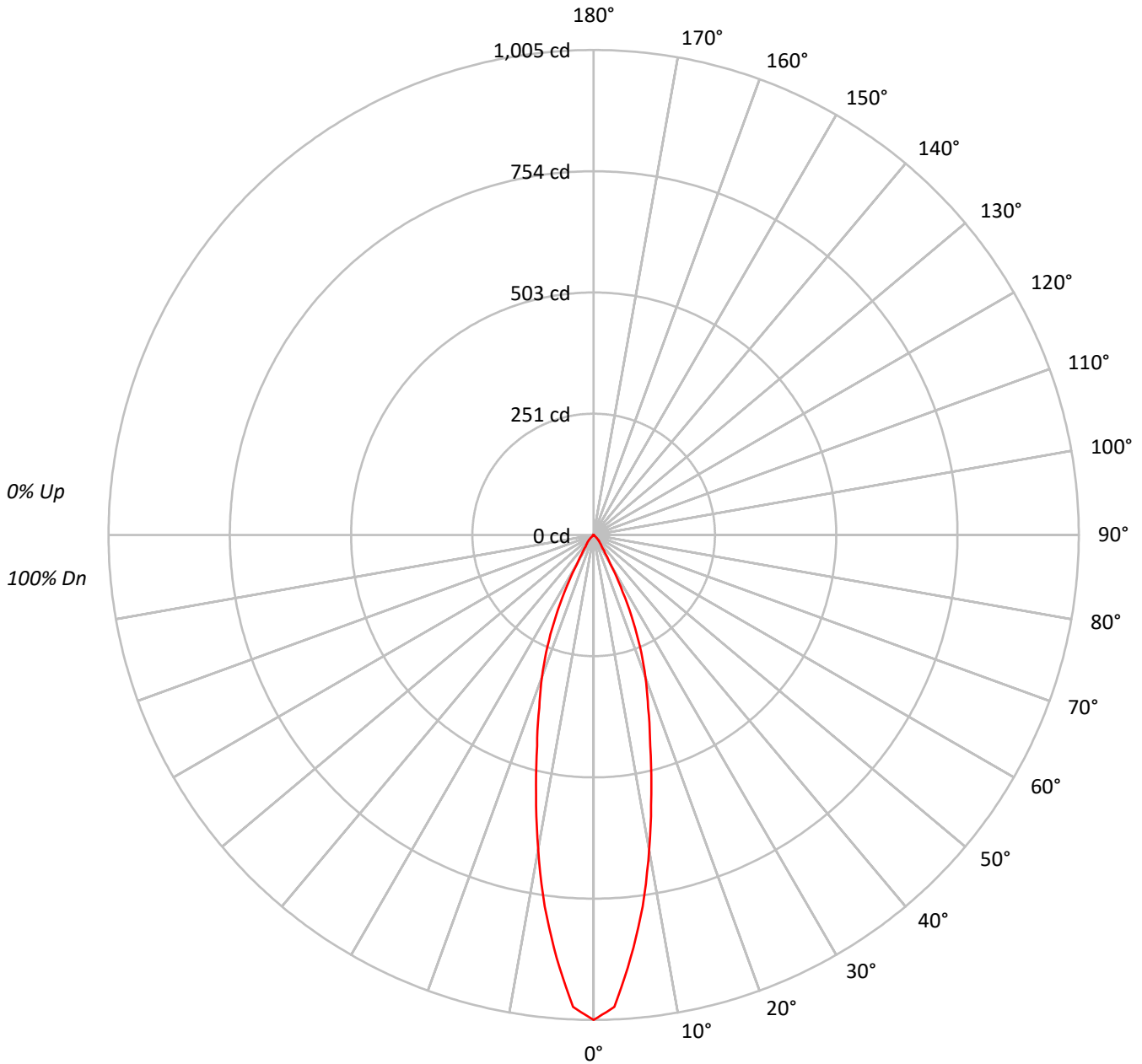
Lumens per Lamp: N/A
Luminaire Lumens: 315.9 lumens
Efficiency: N/A
Efficacy: 51.8 lumens/watt
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.52
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 6.1
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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | | 106 | 106 | 106 | | 102 | 102 | 102 | 100 |
| 1 | 115 | 112 | 110 | 108 | 112 | 110 | 108 | 107 | 106 | 105 | 103 | | 102 | 101 | 100 | | 99 | 98 | 97 | 96 |
| 2 | 110 | 106 | 103 | 100 | 108 | 105 | 102 | 99 | 101 | 99 | 97 | | 99 | 97 | 95 | | 96 | 94 | 93 | 91 |
| 3 | 106 | 101 | 97 | 94 | 104 | 100 | 96 | 93 | 97 | 94 | 92 | | 95 | 92 | 90 | | 93 | 91 | 89 | 87 |
| 4 | 102 | 96 | 92 | 88 | 101 | 95 | 91 | 88 | 93 | 90 | 87 | | 91 | 88 | 86 | | 89 | 87 | 85 | 84 |
| 5 | 98 | 92 | 87 | 84 | 97 | 91 | 87 | 83 | 89 | 86 | 83 | | 88 | 85 | 82 | | 86 | 84 | 81 | 80 |
| 6 | 95 | 88 | 83 | 80 | 94 | 87 | 83 | 79 | 86 | 82 | 79 | | 84 | 81 | 78 | | 83 | 80 | 78 | 77 |
| 7 | 92 | 84 | 80 | 76 | 90 | 84 | 79 | 76 | 83 | 79 | 76 | | 81 | 78 | 75 | | 80 | 77 | 75 | 74 |
| 8 | 88 | 81 | 76 | 73 | 87 | 80 | 76 | 73 | 79 | 75 | 73 | | 79 | 75 | 72 | | 78 | 74 | 72 | 71 |
| 9 | 86 | 78 | 73 | 70 | 85 | 77 | 73 | 70 | 77 | 73 | 70 | | 76 | 72 | 70 | | 75 | 72 | 69 | 68 |
| 10 | 83 | 75 | 70 | 67 | 82 | 75 | 70 | 67 | 74 | 70 | 67 | | 73 | 70 | 67 | | 73 | 69 | 67 | 66 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 495896 |
| 5° | 435585 |
| 10° | 331756 |
| 15° | 231283 |
| 20° | 164286 |
| 25° | 100657 |
| 30° | 40050 |
| 35° | 18069 |
| 40° | 11722 |
| 45° | 6070 |
| 50° | 614 |
| 55° | 688 |
| 60° | 0 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6070 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 77.3 | 24.5 |
| 10°-20° | 127.2 | 40.3 |
| 20°-30° | 83.1 | 26.3 |
| 30°-40° | 21.5 | 6.8 |
| 40°-50° | 6.4 | 2.0 |
| 50°-60° | 0.4 | 0.1 |
| 60°-70° | 0.0 | 0.0 |
| 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° | 287.6 | 91.0 |
| 0°-40° | 309.1 | 97.8 |
| 0°-60° | 315.9 | 100.0 |
| 0°-90° | 315.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 315.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1005 | |
| 5° | 880 | 77 |
| 15° | 453 | 127 |
| 25° | 185 | 83 |
| 35° | 30 | 22 |
| 45° | 9 | 6 |
| 55° | 1 | 0 |
| 65° | 0 | 0 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1005.1 |
| 2.5° | 979.0 |
| 5° | 879.5 |
| 7.5° | 776.7 |
| 10° | 662.2 |
| 12.5° | 550.7 |
| 15° | 452.8 |
| 17.5° | 375.3 |
| 20° | 312.9 |
| 22.5° | 250.5 |
| 25° | 184.9 |
| 27.5° | 120.1 |
| 30° | 70.3 |
| 32.5° | 42.7 |
| 35° | 30.0 |
| 37.5° | 23.7 |
| 40° | 18.2 |
| 42.5° | 14.2 |
| 45° | 8.7 |
| 47.5° | 1.6 |
| 50° | 0.8 |
| 52.5° | 0.8 |
| 55° | 0.8 |
| 57.5° | 0.0 |
| 60° | 0.0 |
| 62.5° | 0.0 |
| 65° | 0.0 |
| 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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