

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: P886325

Luminaire Tested: ML204LSFL9FS1E-TIR1D40FL-TL2RDMBB-550LM-2700K

Issue Date: 6/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P886325
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2402-314-82)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 6/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML204LSFL9FS1E-TIR1D40FL-TL2RDMBB-550LM-2700K
Description: 2IN ROUND ML FLEX, SELECTABLE CCT, WITH 40D TIR, MATTE BLACK BAFFLED TRIM
Light Source: (1) STANDARD SELECTABLE LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: -

Summary

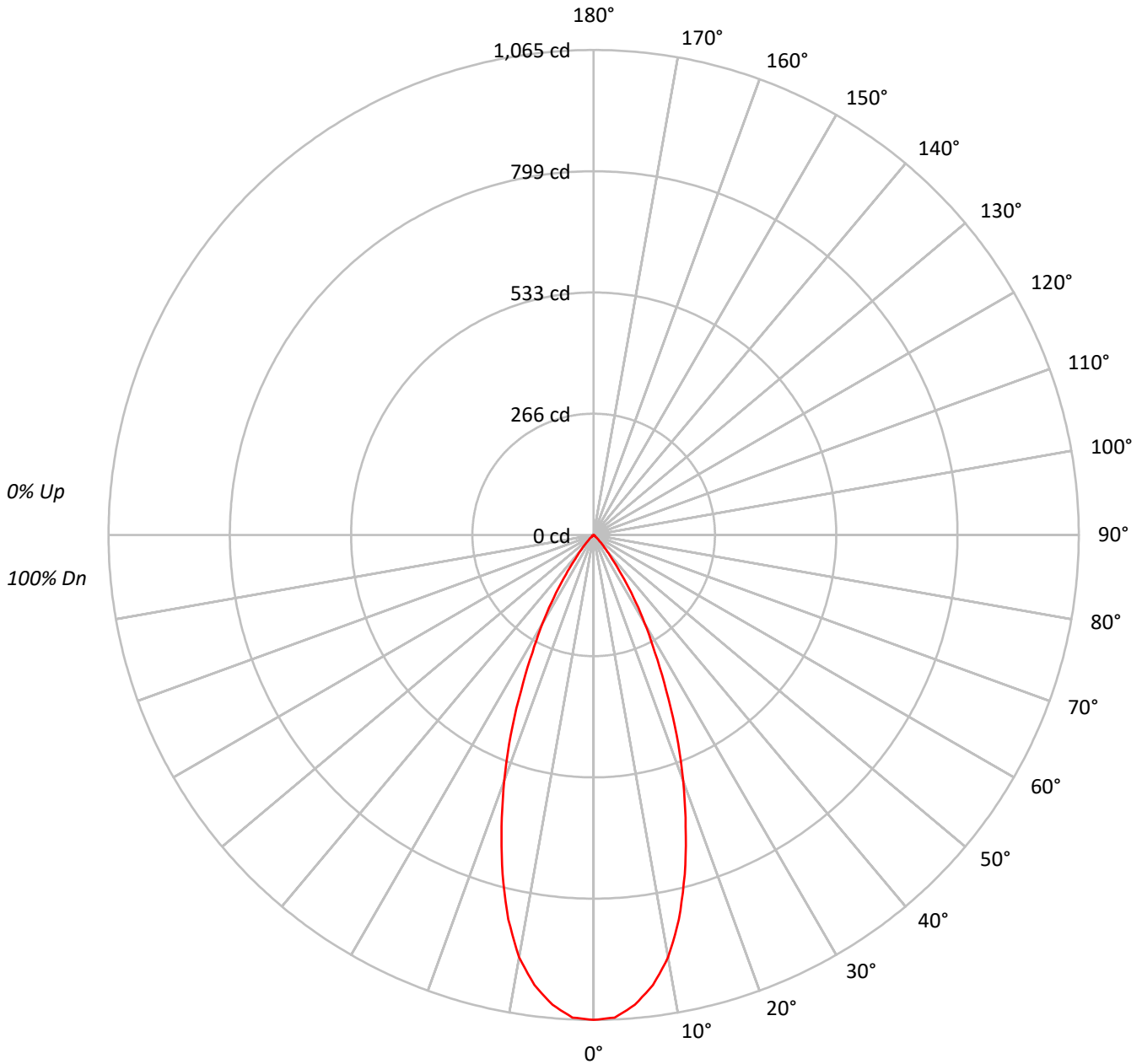
Lumens per Lamp: N/A
Luminaire Lumens: 566.9 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.67
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 7.9
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



TEST NUMBER: P886325
CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2RDMBB-550LM-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P886325

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2RDMBB-550LM-2700K

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 | 100 | 100 | 100 |
| 1 | 114 | 112 | 109 | 107 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 98 | 98 | 97 | 95 | 95 | 95 | 95 |
| 2 | 109 | 105 | 102 | 99 | 107 | 103 | 100 | 97 | 100 | 98 | 95 | 97 | 95 | 93 | 95 | 93 | 91 | 90 | 90 | 90 | 90 |
| 3 | 105 | 99 | 95 | 91 | 103 | 98 | 94 | 91 | 95 | 92 | 89 | 93 | 90 | 88 | 91 | 88 | 86 | 85 | 85 | 85 | 85 |
| 4 | 100 | 94 | 89 | 85 | 99 | 93 | 88 | 85 | 91 | 87 | 84 | 89 | 85 | 83 | 87 | 84 | 82 | 81 | 81 | 81 | 81 |
| 5 | 96 | 89 | 84 | 80 | 95 | 88 | 83 | 80 | 86 | 82 | 79 | 85 | 81 | 78 | 83 | 80 | 78 | 76 | 76 | 76 | 76 |
| 6 | 92 | 84 | 79 | 76 | 91 | 84 | 79 | 75 | 82 | 78 | 75 | 81 | 77 | 74 | 80 | 76 | 74 | 73 | 73 | 73 | 73 |
| 7 | 88 | 80 | 75 | 71 | 87 | 80 | 75 | 71 | 79 | 74 | 71 | 77 | 73 | 71 | 76 | 73 | 70 | 69 | 69 | 69 | 69 |
| 8 | 85 | 77 | 71 | 68 | 84 | 76 | 71 | 68 | 75 | 71 | 67 | 74 | 70 | 67 | 73 | 70 | 67 | 66 | 66 | 66 | 66 |
| 9 | 82 | 73 | 68 | 65 | 81 | 73 | 68 | 64 | 72 | 67 | 64 | 71 | 67 | 64 | 70 | 67 | 64 | 63 | 63 | 63 | 63 |
| 10 | 78 | 70 | 65 | 62 | 78 | 70 | 65 | 61 | 69 | 64 | 61 | 68 | 64 | 61 | 67 | 64 | 61 | 60 | 60 | 60 | 60 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 525400 |
| 5° | 513044 |
| 10° | 471883 |
| 15° | 394274 |
| 20° | 301322 |
| 25° | 205178 |
| 30° | 127614 |
| 35° | 63844 |
| 40° | 27695 |
| 45° | 9768 |
| 50° | 3070 |
| 55° | 860 |
| 60° | 0 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9768 cd/sqm



TEST NUMBER: P886325

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2RDMBB-550LM-2700K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 95.9 | 16.9 |
| 10°-20° | 211.9 | 37.4 |
| 20°-30° | 173.7 | 30.6 |
| 30°-40° | 71.3 | 12.6 |
| 40°-50° | 13.0 | 2.3 |
| 50°-60° | 1.1 | 0.2 |
| 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° | 481.5 | 84.9 |
| 0°-40° | 552.8 | 97.5 |
| 0°-60° | 566.9 | 100.0 |
| 0°-90° | 566.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 566.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1065 | |
| 5° | 1036 | 96 |
| 15° | 772 | 212 |
| 25° | 377 | 174 |
| 35° | 106 | 71 |
| 45° | 14 | 13 |
| 55° | 1 | 1 |
| 65° | 0 | 0 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



TEST NUMBER: P886325

CATALOG NUMBER: ML204LSFL9FS1E-TIR1D40FL-TL2RDMBB-550LM-2700K

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1064.9 |
| 2.5° | 1060.9 |
| 5° | 1035.9 |
| 7.5° | 996.9 |
| 10° | 941.9 |
| 12.5° | 864.9 |
| 15° | 771.9 |
| 17.5° | 671.9 |
| 20° | 573.9 |
| 22.5° | 475.9 |
| 25° | 376.9 |
| 27.5° | 291.0 |
| 30° | 224.0 |
| 32.5° | 163.0 |
| 35° | 106.0 |
| 37.5° | 66.0 |
| 40° | 43.0 |
| 42.5° | 26.0 |
| 45° | 14.0 |
| 47.5° | 6.0 |
| 50° | 4.0 |
| 52.5° | 2.0 |
| 55° | 1.0 |
| 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

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



— 0°-180°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)