

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: P677525

Luminaire Tested: ML408LSFL95FS1E-TL40R2GMW-5000K

Issue Date: 4/25/2023

Test Information

Test Method: LM-79-2019
Report Number: P677525
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2304-979-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: ML408LSFL95FS1E-TL40R2GMW-5000K
Description: RETROFIT, CONICAL LENS TRIM
Light Source: (1) SELECTABLE LUMEN LED 95CRI / 5000K CCT
Ballast/Driver: -

Summary

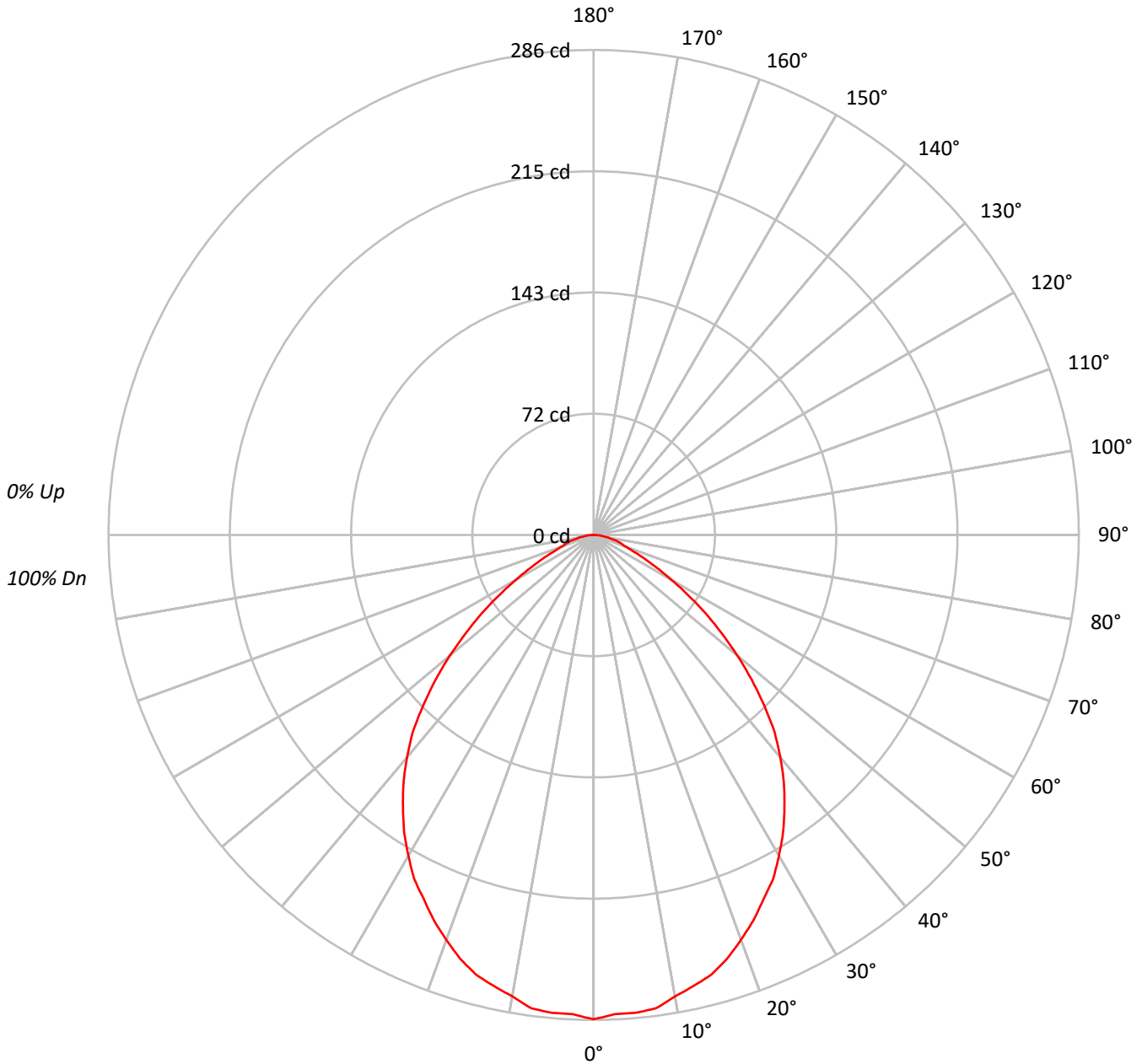
Lumens per Lamp: N/A
Luminaire Lumens: 567.0 lumens
Efficiency: N/A
Efficacy: 55.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.23
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 10.3
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 | | | 100 |
| 1 | 111 | 107 | 103 | 100 | 108 | 105 | 102 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 93 | 92 | 90 | 88 | | | 88 |
| 2 | 103 | 96 | 90 | 85 | 100 | 94 | 89 | 84 | 90 | 86 | 82 | 87 | 84 | 80 | 84 | 81 | 79 | 77 | | | 77 |
| 3 | 95 | 86 | 79 | 73 | 92 | 84 | 78 | 73 | 81 | 76 | 71 | 79 | 74 | 70 | 76 | 72 | 69 | 67 | | | 67 |
| 4 | 88 | 77 | 70 | 64 | 86 | 76 | 69 | 63 | 74 | 67 | 62 | 71 | 66 | 62 | 69 | 65 | 61 | 59 | | | 59 |
| 5 | 81 | 70 | 62 | 56 | 79 | 69 | 61 | 56 | 67 | 60 | 55 | 65 | 59 | 55 | 63 | 58 | 54 | 52 | | | 52 |
| 6 | 76 | 64 | 56 | 50 | 74 | 63 | 55 | 50 | 61 | 54 | 49 | 59 | 53 | 49 | 58 | 53 | 48 | 47 | | | 47 |
| 7 | 70 | 58 | 50 | 45 | 69 | 57 | 50 | 45 | 56 | 49 | 44 | 55 | 48 | 44 | 53 | 48 | 44 | 42 | | | 42 |
| 8 | 66 | 53 | 46 | 40 | 64 | 53 | 45 | 40 | 52 | 45 | 40 | 50 | 44 | 40 | 49 | 44 | 40 | 38 | | | 38 |
| 9 | 62 | 49 | 42 | 37 | 60 | 49 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 34 | | | 34 |
| 10 | 58 | 46 | 38 | 34 | 57 | 45 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 43 | 37 | 33 | 31 | | | 31 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 35228 |
| 5° | 35028 |
| 10° | 34606 |
| 15° | 34274 |
| 20° | 33340 |
| 25° | 32241 |
| 30° | 31106 |
| 35° | 29528 |
| 40° | 27550 |
| 45° | 24788 |
| 50° | 21204 |
| 55° | 17268 |
| 60° | 12976 |
| 65° | 9602 |
| 70° | 7105 |
| 75° | 6910 |
| 80° | 5612 |
| 85° | 5519 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 24788 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 26.8 | 4.7 |
| 10°-20° | 75.4 | 13.3 |
| 20°-30° | 109.2 | 19.3 |
| 30°-40° | 122.4 | 21.6 |
| 40°-50° | 109.1 | 19.2 |
| 50°-60° | 71.8 | 12.7 |
| 60°-70° | 33.6 | 5.9 |
| 70°-80° | 14.7 | 2.6 |
| 80°-90° | 3.9 | 0.7 |
| 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° | 211.4 | 37.3 |
| 0°-40° | 333.8 | 58.9 |
| 0°-60° | 514.8 | 90.8 |
| 0°-90° | 567.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 567.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 286 | |
| 5° | 283 | 27 |
| 15° | 268 | 75 |
| 25° | 237 | 109 |
| 35° | 196 | 122 |
| 45° | 142 | 109 |
| 55° | 80 | 72 |
| 65° | 33 | 34 |
| 75° | 14 | 15 |
| 85° | 4 | 4 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 285.6 |
| 2.5° | 282.9 |
| 5° | 282.9 |
| 7.5° | 281.6 |
| 10° | 276.3 |
| 12.5° | 272.4 |
| 15° | 268.4 |
| 17.5° | 261.9 |
| 20° | 254.0 |
| 22.5° | 246.1 |
| 25° | 236.9 |
| 27.5° | 229.0 |
| 30° | 218.4 |
| 32.5° | 207.9 |
| 35° | 196.1 |
| 37.5° | 184.2 |
| 40° | 171.1 |
| 42.5° | 157.9 |
| 45° | 142.1 |
| 47.5° | 126.3 |
| 50° | 110.5 |
| 52.5° | 94.7 |
| 55° | 80.3 |
| 57.5° | 65.8 |
| 60° | 52.6 |
| 62.5° | 42.1 |
| 65° | 32.9 |
| 67.5° | 25.0 |
| 70° | 19.7 |
| 72.5° | 17.1 |
| 75° | 14.5 |
| 77.5° | 10.5 |
| 80° | 7.9 |
| 82.5° | 5.3 |
| 85° | 3.9 |
| 87.5° | 1.3 |
| 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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