

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 COMMERCIAL

Report Number: P838323

Luminaire Tested: HCSQ607D010-HM60525930-61SQMW

Issue Date: 5/21/2024

Test Information

Test Method: LM-79-2019
Report Number: P838323
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-166-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCSQ607D010-HM60525930-61SQMW
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, MATTE WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

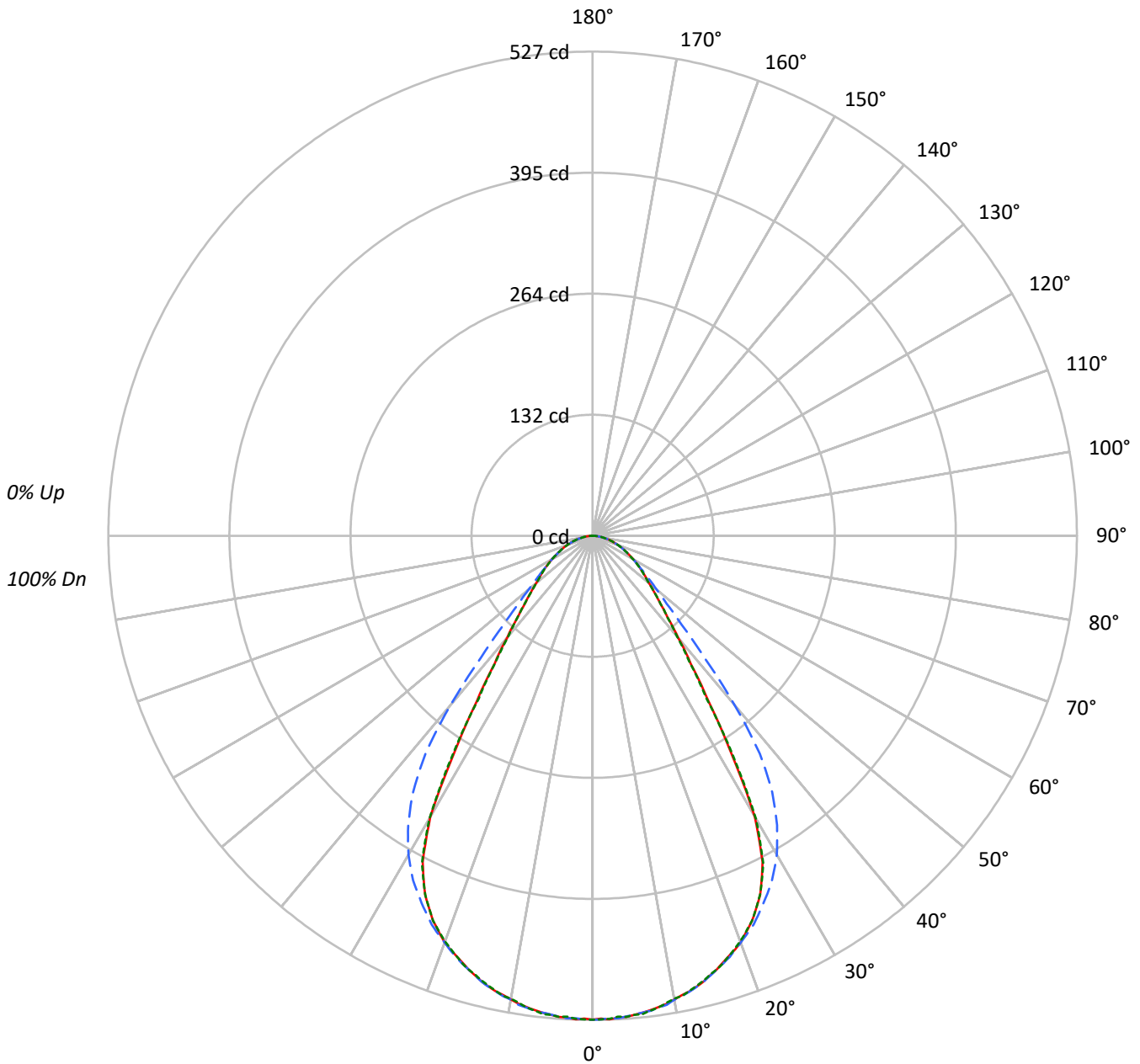
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 776.9 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.11
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 8
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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CATALOG NUMBER: HCSQ607D010-HM60525930-61SQMW

Luminous Intensity Polar Plot





TEST NUMBER: P838323

CATALOG NUMBER: HCSQ607D010-HM60525930-61SQMW

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 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 | | | | | | | | | | | | | | | | | | | |
| 2 | 104 | 98 | 92 | 88 | 102 | 96 | 91 | 87 | 92 | 88 | 85 | 89 | 86 | 83 | 86 | 84 | 81 | 79 | | | | | | | | | | | | | | | | | | | |
| 3 | 97 | 89 | 82 | 77 | 95 | 87 | 81 | 77 | 84 | 79 | 75 | 82 | 78 | 74 | 79 | 76 | 73 | 71 | | | | | | | | | | | | | | | | | | | |
| 4 | 91 | 81 | 74 | 69 | 89 | 80 | 73 | 68 | 77 | 72 | 67 | 75 | 70 | 67 | 73 | 69 | 66 | 64 | | | | | | | | | | | | | | | | | | | |
| 5 | 85 | 74 | 67 | 62 | 83 | 73 | 66 | 61 | 71 | 65 | 61 | 70 | 64 | 60 | 68 | 63 | 60 | 58 | | | | | | | | | | | | | | | | | | | |
| 6 | 80 | 69 | 61 | 56 | 78 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 59 | 55 | 63 | 58 | 54 | 53 | | | | | | | | | | | | | | | | | | | |
| 7 | 75 | 63 | 56 | 51 | 73 | 63 | 56 | 51 | 61 | 55 | 51 | 60 | 54 | 50 | 59 | 54 | 50 | 48 | | | | | | | | | | | | | | | | | | | |
| 8 | 70 | 59 | 52 | 47 | 69 | 58 | 51 | 47 | 57 | 51 | 46 | 56 | 50 | 46 | 55 | 50 | 46 | 44 | | | | | | | | | | | | | | | | | | | |
| 9 | 66 | 55 | 48 | 43 | 65 | 54 | 48 | 43 | 53 | 47 | 43 | 52 | 47 | 43 | 51 | 46 | 43 | 41 | | | | | | | | | | | | | | | | | | | |
| 10 | 63 | 51 | 45 | 40 | 62 | 51 | 44 | 40 | 50 | 44 | 40 | 49 | 44 | 40 | 48 | 43 | 40 | 38 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 22677 | 22677 | 22677 |
| 5° | 22621 | 22604 | 22621 |
| 10° | 22402 | 22415 | 22367 |
| 15° | 22069 | 22082 | 22033 |
| 20° | 21572 | 21585 | 21521 |
| 25° | 20494 | 20931 | 20475 |
| 30° | 17550 | 19926 | 17659 |
| 35° | 11532 | 17913 | 11358 |
| 40° | 8150 | 13512 | 8004 |
| 45° | 6320 | 8318 | 6363 |
| 50° | 5372 | 6062 | 5325 |
| 55° | 4834 | 4977 | 4834 |
| 60° | 4374 | 4374 | 4374 |
| 65° | 4014 | 3973 | 3973 |
| 70° | 3663 | 3663 | 3701 |
| 75° | 3427 | 3310 | 3360 |
| 80° | 3000 | 3000 | 3000 |
| 85° | 2569 | 2569 | 2569 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8318 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 49.7 | 6.4 |
| 10°-20° | 139.5 | 17.9 |
| 20°-30° | 198.7 | 25.6 |
| 30°-40° | 169.4 | 21.8 |
| 40°-50° | 93.7 | 12.1 |
| 50°-60° | 59.1 | 7.6 |
| 60°-70° | 39.2 | 5.0 |
| 70°-80° | 21.5 | 2.8 |
| 80°-90° | 6.1 | 0.8 |
| 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° | 387.8 | 49.9 |
| 0°-40° | 557.3 | 71.7 |
| 0°-60° | 710.1 | 91.4 |
| 0°-90° | 776.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 776.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 527 | 527 | 527 | 527 | 527 | |
| 5° | 523 | 524 | 523 | 522 | 523 | 50 |
| 15° | 495 | 495 | 495 | 495 | 494 | 139 |
| 25° | 431 | 436 | 441 | 436 | 431 | 195 |
| 35° | 219 | 259 | 341 | 259 | 216 | 143 |
| 45° | 104 | 114 | 137 | 113 | 104 | 82 |
| 55° | 64 | 66 | 66 | 65 | 64 | 58 |
| 65° | 39 | 40 | 39 | 39 | 39 | 39 |
| 75° | 21 | 20 | 20 | 20 | 20 | 22 |
| 85° | 5 | 5 | 5 | 6 | 5 | 6 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P838323

CATALOG NUMBER: HCSQ607D010-HM60525930-61SQMW

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 |
| 1° | 525.6 | 526.4 | 526.4 | 526.0 | 526.4 |
| 2° | 526.7 | 525.6 | 525.6 | 525.6 | 526.0 |
| 3° | 525.3 | 526.0 | 526.0 | 524.9 | 524.2 |
| 4° | 524.9 | 524.5 | 524.5 | 525.6 | 524.9 |
| 5° | 523.4 | 524.2 | 523.0 | 522.3 | 523.4 |
| 6° | 521.9 | 522.3 | 521.9 | 522.3 | 523.4 |
| 7° | 520.1 | 521.2 | 520.8 | 520.5 | 520.5 |
| 8° | 517.9 | 519.4 | 518.6 | 518.6 | 518.3 |
| 9° | 515.7 | 516.1 | 516.8 | 516.8 | 514.6 |
| 10° | 512.4 | 513.5 | 512.7 | 513.1 | 511.6 |
| 11° | 509.4 | 510.9 | 510.5 | 509.8 | 510.2 |
| 12° | 506.9 | 507.6 | 507.2 | 506.1 | 506.5 |
| 13° | 503.5 | 504.3 | 503.9 | 503.9 | 502.8 |
| 14° | 499.9 | 499.1 | 500.2 | 499.5 | 499.1 |
| 15° | 495.1 | 495.1 | 495.4 | 495.1 | 494.3 |
| 16° | 490.7 | 491.0 | 491.0 | 490.7 | 491.0 |
| 17° | 485.5 | 487.0 | 486.6 | 485.9 | 486.2 |
| 18° | 480.7 | 481.8 | 482.2 | 481.8 | 480.7 |
| 19° | 476.3 | 477.0 | 476.7 | 475.2 | 475.2 |
| 20° | 470.8 | 471.1 | 471.1 | 470.4 | 469.7 |
| 22.5° | 453.5 | 456.1 | 457.9 | 456.4 | 453.5 |
| 25° | 431.4 | 436.5 | 440.6 | 436.2 | 431.0 |
| 27.5° | 400.5 | 410.8 | 422.9 | 411.9 | 402.3 |
| 30° | 353.0 | 376.6 | 400.8 | 378.8 | 355.2 |
| 32.5° | 280.8 | 327.2 | 373.6 | 331.6 | 285.3 |
| 35° | 219.4 | 258.8 | 340.8 | 259.1 | 216.1 |
| 37.5° | 175.2 | 203.2 | 298.9 | 201.3 | 173.4 |
| 40° | 145.0 | 163.8 | 240.4 | 163.1 | 142.4 |
| 42.5° | 121.1 | 135.5 | 180.0 | 134.0 | 121.1 |
| 45° | 103.8 | 113.7 | 136.6 | 113.0 | 104.5 |
| 47.5° | 90.9 | 97.2 | 109.3 | 96.8 | 90.9 |
| 50° | 80.2 | 83.9 | 90.5 | 83.6 | 79.5 |
| 52.5° | 71.8 | 74.0 | 76.6 | 73.2 | 71.0 |
| 55° | 64.4 | 65.5 | 66.3 | 65.2 | 64.4 |
| 57.5° | 57.4 | 58.2 | 57.8 | 57.4 | 57.1 |
| 60° | 50.8 | 51.2 | 50.8 | 51.2 | 50.8 |
| 62.5° | 44.9 | 45.3 | 44.5 | 44.9 | 44.5 |
| 65° | 39.4 | 39.8 | 39.0 | 39.4 | 39.0 |
| 67.5° | 34.2 | 34.2 | 34.2 | 34.2 | 33.9 |
| 70° | 29.1 | 29.4 | 29.1 | 29.4 | 29.4 |
| 72.5° | 24.7 | 24.7 | 24.3 | 24.7 | 24.7 |
| 75° | 20.6 | 20.2 | 19.9 | 20.2 | 20.2 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-----|-------|-----|-------|-----|
| 82.5° | 8.8 | 8.8 | 8.5 | 8.8 | 8.8 |
| 85° | 5.2 | 5.2 | 5.2 | 5.5 | 5.2 |
| 87.5° | 2.6 | 2.2 | 2.2 | 2.6 | 2.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 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





— 0°-180° - - 45°-225° - - - - 90°-270°

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Scaled Data Report



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Scaled Data Report





| | | | | | |
|-------|------|------|------|------|------|
| 77.5° | 16.2 | 16.2 | 15.8 | 16.2 | 16.2 |
| 80° | 12.1 | 12.5 | 12.1 | 12.5 | 12.1 |

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Scaled Data Report



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