

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P581509

Luminaire Tested: **HCC4W07D010MW-HM40525930-41WDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581509  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W07D010MW-HM40525930-41WDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 748.7 lumens  
Efficiency: N/A  
Efficacy: 93.6 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.07 / 1.04  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

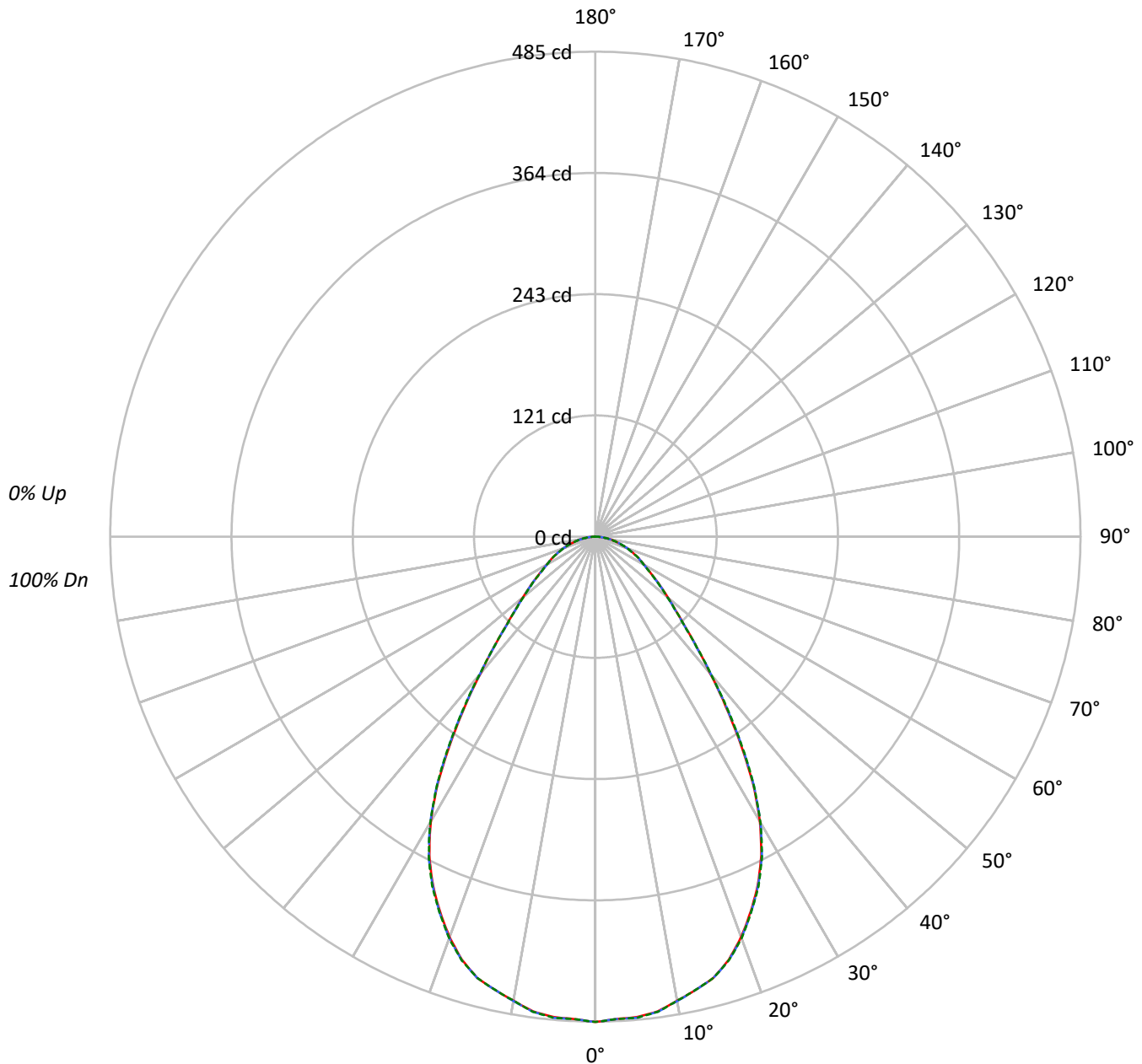
Input Watts (W): 8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P581509

CATALOG NUMBER: HCC4W07D010MW-HM40525930-41WDW

### Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P581509

CATALOG NUMBER: HCC4W07D010MW-HM40525930-41WDW

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99  | 101 | 98  | 96  |  | 97  | 95  | 93  |  | 94  |
| 2   | 103 | 97  | 91  | 87  | 101 | 95  | 90  | 86  | 91  | 87  | 84  |  | 88  | 85  | 82  |  | 85  |
| 3   | 96  | 87  | 81  | 76  | 94  | 86  | 80  | 75  | 83  | 78  | 74  |  | 81  | 76  | 72  |  | 78  |
| 4   | 90  | 80  | 72  | 67  | 87  | 78  | 72  | 66  | 76  | 70  | 66  |  | 74  | 69  | 65  |  | 72  |
| 5   | 84  | 73  | 65  | 60  | 82  | 72  | 65  | 59  | 70  | 64  | 59  |  | 68  | 63  | 58  |  | 66  |
| 6   | 78  | 67  | 59  | 54  | 77  | 66  | 59  | 54  | 64  | 58  | 53  |  | 63  | 57  | 53  |  | 61  |
| 7   | 73  | 62  | 54  | 49  | 72  | 61  | 54  | 49  | 60  | 53  | 49  |  | 58  | 53  | 48  |  | 57  |
| 8   | 69  | 57  | 50  | 45  | 68  | 57  | 50  | 45  | 55  | 49  | 45  |  | 54  | 49  | 44  |  | 53  |
| 9   | 65  | 53  | 46  | 41  | 64  | 53  | 46  | 41  | 52  | 45  | 41  |  | 51  | 45  | 41  |  | 50  |
| 10  | 61  | 50  | 43  | 38  | 60  | 49  | 43  | 38  | 48  | 42  | 38  |  | 48  | 42  | 38  |  | 47  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 59872 | 59872 | 59872 |
| 5°  | 59717 | 59791 | 59791 |
| 10° | 59017 | 59080 | 59017 |
| 15° | 58319 | 58319 | 58319 |
| 20° | 55931 | 56049 | 56114 |
| 25° | 52302 | 52384 | 52506 |
| 30° | 46873 | 47001 | 47001 |
| 35° | 38051 | 38352 | 38442 |
| 40° | 28709 | 28870 | 28951 |
| 45° | 21997 | 21909 | 21909 |
| 50° | 18134 | 18038 | 18038 |
| 55° | 15569 | 15440 | 15440 |
| 60° | 13864 | 13765 | 13765 |
| 65° | 13046 | 13046 | 13046 |
| 70° | 12154 | 12154 | 12154 |
| 75° | 11009 | 11247 | 11009 |
| 80° | 10371 | 10016 | 10371 |
| 85° | 8491  | 8491  | 8491  |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P581509

CATALOG NUMBER: HCC4W07D010MW-HM40525930-41WDW

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 45.7   | 6.1       |
| 10°-20°   | 128.0  | 17.1      |
| 20°-30°   | 175.8  | 23.5      |
| 30°-40°   | 158.1  | 21.1      |
| 40°-50°   | 99.9   | 13.3      |
| 50°-60°   | 65.2   | 8.7       |
| 60°-70°   | 44.2   | 5.9       |
| 70°-80°   | 24.9   | 3.3       |
| 80°-90°   | 7.0    | 0.9       |
| 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°    | 349.5  | 46.7      |
| 0°-40°    | 507.6  | 67.8      |
| 0°-60°    | 672.8  | 89.9      |
| 0°-90°    | 748.7  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 748.7  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 485 | 485   | 485 | 485   | 485 |      |
| 5°  | 482 | 482   | 483 | 483   | 483 | 46   |
| 15° | 457 | 457   | 457 | 457   | 457 | 128  |
| 25° | 384 | 385   | 385 | 386   | 386 | 175  |
| 35° | 253 | 254   | 255 | 256   | 255 | 157  |
| 45° | 126 | 126   | 126 | 126   | 126 | 100  |
| 55° | 72  | 72    | 72  | 72    | 72  | 65   |
| 65° | 45  | 45    | 45  | 45    | 45  | 44   |
| 75° | 23  | 24    | 24  | 24    | 23  | 25   |
| 85° | 6   | 6     | 6   | 6     | 6   | 7    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P581509

CATALOG NUMBER: HCC4W07D010MW-HM40525930-41WDW

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 485.4 | 485.4 | 485.4 | 485.4 | 485.4 |
| 2.5°  | 482.9 | 482.9 | 482.9 | 482.9 | 482.9 |
| 5°    | 482.3 | 482.3 | 482.9 | 482.9 | 482.9 |
| 7.5°  | 478.8 | 479.3 | 479.3 | 479.3 | 479.3 |
| 10°   | 471.2 | 471.2 | 471.7 | 471.7 | 471.2 |
| 12.5° | 464.2 | 464.2 | 464.2 | 464.8 | 464.2 |
| 15°   | 456.7 | 456.7 | 456.7 | 456.7 | 456.7 |
| 17.5° | 443.6 | 444.2 | 444.2 | 444.2 | 444.2 |
| 20°   | 426.1 | 427.0 | 427.0 | 427.5 | 427.5 |
| 22.5° | 405.9 | 406.4 | 406.9 | 407.4 | 406.9 |
| 25°   | 384.3 | 384.9 | 384.9 | 385.8 | 385.8 |
| 27.5° | 359.3 | 359.7 | 360.7 | 360.7 | 360.7 |
| 30°   | 329.1 | 329.6 | 330.0 | 330.0 | 330.0 |
| 32.5° | 293.4 | 293.4 | 294.4 | 294.9 | 294.4 |
| 35°   | 252.7 | 253.7 | 254.7 | 255.7 | 255.3 |
| 37.5° | 214.1 | 215.0 | 215.5 | 215.5 | 216.0 |
| 40°   | 178.3 | 179.3 | 179.3 | 180.4 | 179.8 |
| 42.5° | 150.2 | 149.8 | 149.8 | 150.7 | 150.2 |
| 45°   | 126.1 | 125.6 | 125.6 | 125.6 | 125.6 |
| 47.5° | 108.6 | 108.0 | 108.0 | 108.0 | 108.0 |
| 50°   | 94.5  | 94.0  | 94.0  | 94.0  | 94.0  |
| 52.5° | 82.8  | 82.4  | 82.4  | 82.4  | 81.9  |
| 55°   | 72.4  | 72.4  | 71.8  | 72.4  | 71.8  |
| 57.5° | 62.8  | 62.8  | 62.8  | 62.8  | 62.8  |
| 60°   | 56.2  | 55.8  | 55.8  | 55.8  | 55.8  |
| 62.5° | 50.2  | 50.2  | 50.2  | 50.2  | 50.2  |
| 65°   | 44.7  | 44.7  | 44.7  | 44.7  | 44.7  |
| 67.5° | 39.1  | 38.7  | 39.1  | 39.1  | 38.7  |
| 70°   | 33.7  | 33.1  | 33.7  | 33.7  | 33.7  |
| 72.5° | 28.1  | 28.1  | 28.1  | 28.7  | 28.1  |
| 75°   | 23.1  | 23.6  | 23.6  | 23.6  | 23.1  |
| 77.5° | 18.5  | 19.1  | 18.5  | 18.5  | 18.5  |
| 80°   | 14.6  | 14.1  | 14.1  | 14.1  | 14.6  |
| 82.5° | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |
| 85°   | 6.0   | 6.0   | 6.0   | 6.0   | 6.0   |
| 87.5° | 2.5   | 2.5   | 2.5   | 2.5   | 2.5   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



Report Generated By 670245859 / DESKTOP-T8S5UU9

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)