

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



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: P581437

Luminaire Tested: **HCC4W07D010MW-HM40525830-41WDW**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581437  
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-HM40525830-41WDW  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

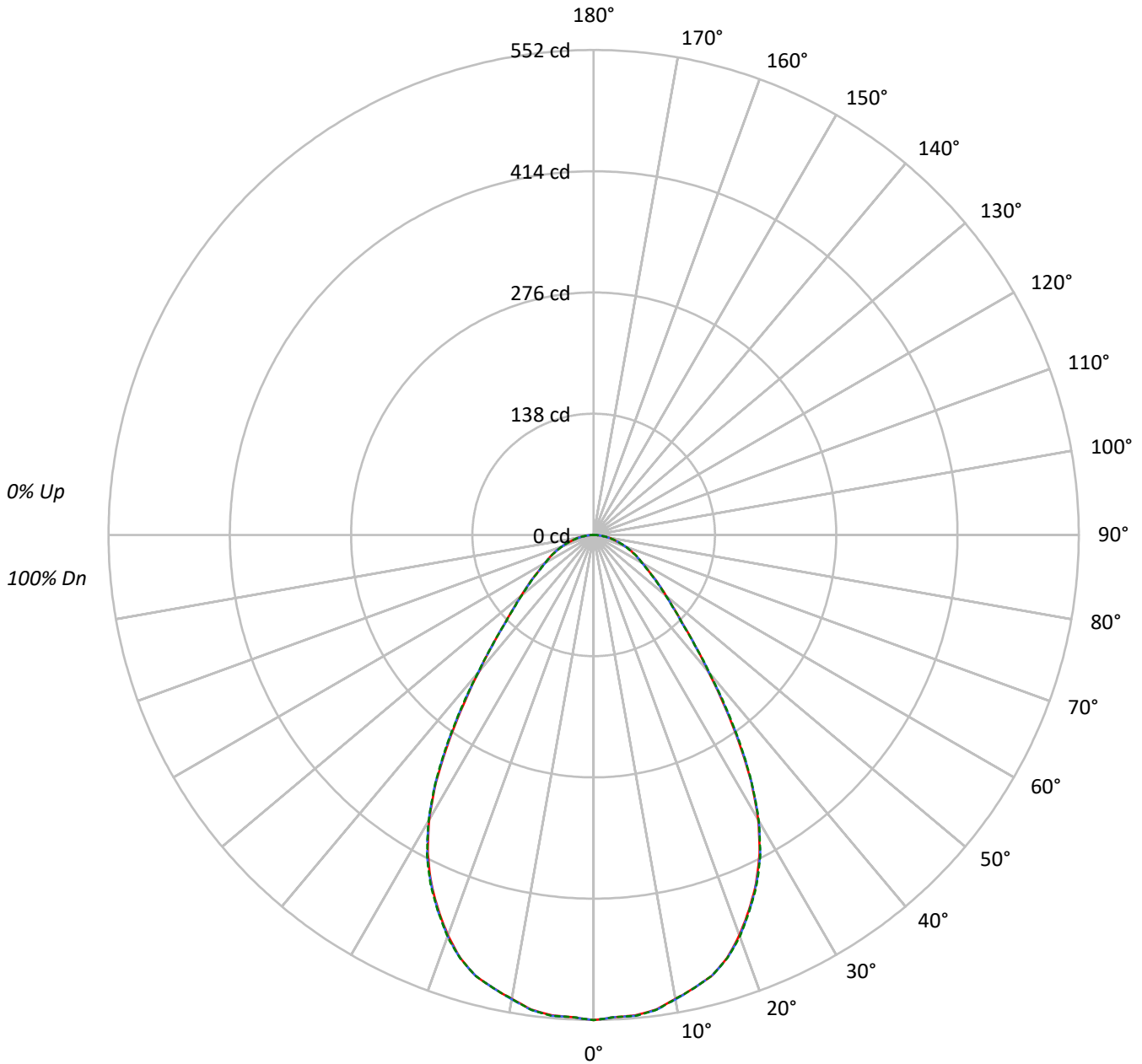
Lumens per Lamp: N/A  
Luminaire Lumens: 852.0 lumens  
Efficiency: N/A  
Efficacy: 106.5 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.07 / 1.04  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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



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### Luminous Intensity Polar Plot



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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |   |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|---|--|---|
| RF  | 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 | 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 | 107 | 104 | 101 | 108 | 105 | 102 | 99  | 101 | 98  | 96  | 97  | 95  | 93  | 94  | 92  | 90  | 89  |    |    |    |    |    |   |  |   |
| 2   | 103 | 97  | 91  | 87  | 101 | 95  | 90  | 86  | 91  | 87  | 84  | 88  | 85  | 82  | 85  | 83  | 80  | 78  |    |    |    |    |    |   |  |   |
| 3   | 96  | 87  | 81  | 76  | 94  | 86  | 80  | 75  | 83  | 78  | 74  | 81  | 76  | 72  | 78  | 74  | 71  | 69  |    |    |    |    |    |   |  |   |
| 4   | 90  | 80  | 72  | 67  | 87  | 78  | 72  | 66  | 76  | 70  | 66  | 74  | 69  | 65  | 72  | 68  | 64  | 62  |    |    |    |    |    |   |  |   |
| 5   | 84  | 73  | 65  | 60  | 82  | 72  | 65  | 59  | 70  | 64  | 59  | 68  | 63  | 58  | 66  | 62  | 58  | 56  |    |    |    |    |    |   |  |   |
| 6   | 78  | 67  | 59  | 54  | 77  | 66  | 59  | 54  | 64  | 58  | 53  | 63  | 57  | 53  | 61  | 56  | 53  | 51  |    |    |    |    |    |   |  |   |
| 7   | 73  | 62  | 54  | 49  | 72  | 61  | 54  | 49  | 60  | 53  | 49  | 58  | 53  | 48  | 57  | 52  | 48  | 46  |    |    |    |    |    |   |  |   |
| 8   | 69  | 57  | 50  | 45  | 68  | 57  | 50  | 45  | 55  | 49  | 45  | 54  | 49  | 44  | 53  | 48  | 44  | 42  |    |    |    |    |    |   |  |   |
| 9   | 65  | 53  | 46  | 41  | 64  | 53  | 46  | 41  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 39  |    |    |    |    |    |   |  |   |
| 10  | 61  | 50  | 43  | 38  | 60  | 49  | 43  | 38  | 48  | 42  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 36  |    |    |    |    |    |   |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 68124 | 68124 | 68124 |
| 5°  | 67963 | 68025 | 68025 |
| 10° | 67158 | 67233 | 67158 |
| 15° | 66351 | 66351 | 66351 |
| 20° | 63636 | 63780 | 63859 |
| 25° | 59515 | 59597 | 59747 |
| 30° | 53325 | 53481 | 53481 |
| 35° | 43306 | 43637 | 43728 |
| 40° | 32670 | 32847 | 32944 |
| 45° | 25032 | 24927 | 24927 |
| 50° | 20609 | 20513 | 20513 |
| 55° | 17698 | 17569 | 17569 |
| 60° | 15813 | 15665 | 15665 |
| 65° | 14856 | 14856 | 14856 |
| 70° | 13849 | 13849 | 13849 |
| 75° | 12534 | 12820 | 12534 |
| 80° | 11791 | 11365 | 11791 |
| 85° | 9624  | 9624  | 9624  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 52.0   | 6.1       |
| 10°-20°   | 145.6  | 17.1      |
| 20°-30°   | 200.1  | 23.5      |
| 30°-40°   | 179.9  | 21.1      |
| 40°-50°   | 113.7  | 13.3      |
| 50°-60°   | 74.2   | 8.7       |
| 60°-70°   | 50.3   | 5.9       |
| 70°-80°   | 28.3   | 3.3       |
| 80°-90°   | 7.9    | 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°    | 397.7  | 46.7      |
| 0°-40°    | 577.6  | 67.8      |
| 0°-60°    | 765.5  | 89.8      |
| 0°-90°    | 852.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 852.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 552 | 552   | 552 | 552   | 552 |      |
| 5°  | 549 | 549   | 549 | 549   | 549 | 52   |
| 15° | 520 | 520   | 520 | 520   | 520 | 145  |
| 25° | 437 | 438   | 438 | 439   | 439 | 200  |
| 35° | 288 | 289   | 290 | 291   | 290 | 179  |
| 45° | 144 | 143   | 143 | 143   | 143 | 114  |
| 55° | 82  | 82    | 82  | 82    | 82  | 74   |
| 65° | 51  | 51    | 51  | 51    | 51  | 50   |
| 75° | 26  | 27    | 27  | 27    | 26  | 28   |
| 85° | 7   | 7     | 7   | 7     | 7   | 8    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 552.3 | 552.3 | 552.3 | 552.3 | 552.3 |
| 2.5°  | 549.4 | 549.4 | 549.4 | 549.4 | 549.4 |
| 5°    | 548.9 | 548.9 | 549.4 | 549.4 | 549.4 |
| 7.5°  | 544.8 | 545.3 | 545.3 | 545.3 | 545.3 |
| 10°   | 536.2 | 536.2 | 536.8 | 536.8 | 536.2 |
| 12.5° | 528.3 | 528.3 | 528.3 | 528.8 | 528.3 |
| 15°   | 519.6 | 519.6 | 519.6 | 519.6 | 519.6 |
| 17.5° | 504.8 | 505.4 | 505.4 | 505.4 | 505.4 |
| 20°   | 484.8 | 485.9 | 485.9 | 486.5 | 486.5 |
| 22.5° | 461.9 | 462.5 | 463.1 | 463.6 | 463.1 |
| 25°   | 437.3 | 437.9 | 437.9 | 439.0 | 439.0 |
| 27.5° | 408.8 | 409.3 | 410.5 | 410.5 | 410.5 |
| 30°   | 374.4 | 375.0 | 375.5 | 375.5 | 375.5 |
| 32.5° | 333.9 | 333.9 | 335.0 | 335.6 | 335.0 |
| 35°   | 287.6 | 288.7 | 289.8 | 291.0 | 290.4 |
| 37.5° | 243.5 | 244.7 | 245.2 | 245.2 | 245.8 |
| 40°   | 202.9 | 204.0 | 204.0 | 205.2 | 204.6 |
| 42.5° | 170.9 | 170.4 | 170.4 | 171.5 | 170.9 |
| 45°   | 143.5 | 142.9 | 142.9 | 142.9 | 142.9 |
| 47.5° | 123.5 | 122.9 | 122.9 | 122.9 | 122.9 |
| 50°   | 107.4 | 106.9 | 106.9 | 106.9 | 106.9 |
| 52.5° | 94.3  | 93.8  | 93.8  | 93.8  | 93.2  |
| 55°   | 82.3  | 82.3  | 81.7  | 82.3  | 81.7  |
| 57.5° | 71.5  | 71.5  | 71.5  | 71.5  | 71.5  |
| 60°   | 64.1  | 63.5  | 63.5  | 63.5  | 63.5  |
| 62.5° | 57.1  | 57.1  | 57.1  | 57.1  | 57.1  |
| 65°   | 50.9  | 50.9  | 50.9  | 50.9  | 50.9  |
| 67.5° | 44.6  | 44.0  | 44.6  | 44.6  | 44.0  |
| 70°   | 38.4  | 37.8  | 38.4  | 38.4  | 38.4  |
| 72.5° | 32.0  | 32.0  | 32.0  | 32.5  | 32.0  |
| 75°   | 26.3  | 26.9  | 26.9  | 26.9  | 26.3  |
| 77.5° | 21.2  | 21.7  | 21.2  | 21.2  | 21.2  |
| 80°   | 16.6  | 16.0  | 16.0  | 16.0  | 16.6  |
| 82.5° | 11.4  | 11.4  | 11.4  | 11.4  | 11.4  |
| 85°   | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   |
| 87.5° | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

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Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report



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

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