

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: P584715

Luminaire Tested: **HCC8W45D010MW-HM82555927-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584715  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC8W45D010MW-HM82555927-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

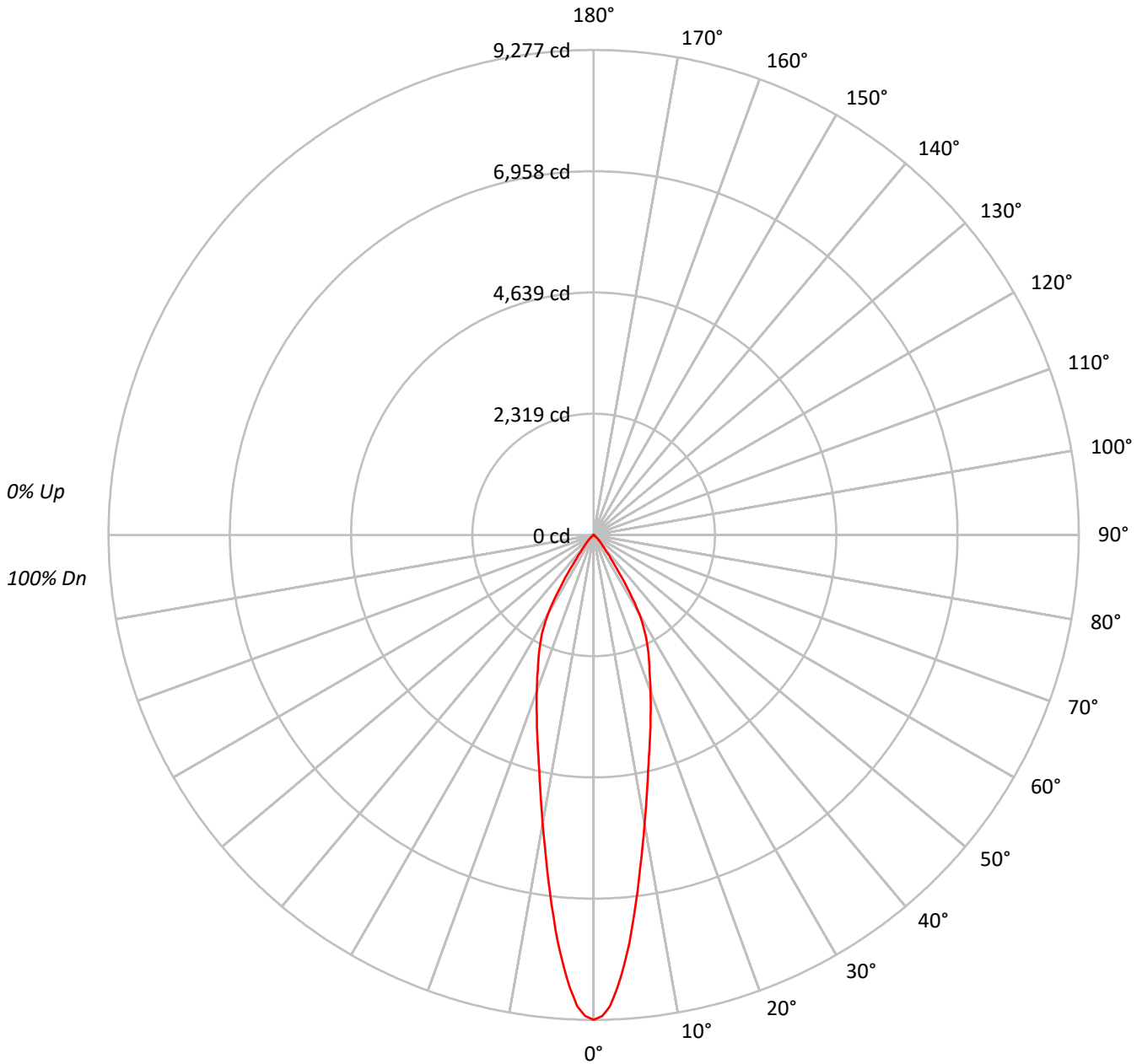
Lumens per Lamp: N/A  
Luminaire Lumens: 3595.4 lumens  
Efficiency: N/A  
Efficacy: 81.7 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.57  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 44  
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  |     |     |     | 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 | 109 | 107 | 106 | 105 | 104 | 102 | 102 | 100 | 99  | 98  | 97  | 96  | 95  | 95  | 95  | 95  |
| 2   | 109 | 105 | 101 | 98  | 107 | 103 | 100 | 97  | 100 | 97  | 95  | 97  | 95  | 93  | 94  | 92  | 91  | 89  | 89  | 89  | 89  |
| 3   | 104 | 99  | 94  | 91  | 102 | 97  | 93  | 90  | 95  | 91  | 88  | 92  | 90  | 87  | 90  | 88  | 86  | 84  | 84  | 84  | 84  |
| 4   | 100 | 93  | 88  | 84  | 98  | 92  | 87  | 84  | 90  | 86  | 83  | 88  | 85  | 82  | 86  | 83  | 81  | 80  | 80  | 80  | 80  |
| 5   | 96  | 88  | 83  | 79  | 94  | 87  | 82  | 79  | 86  | 81  | 78  | 84  | 80  | 77  | 82  | 79  | 77  | 75  | 75  | 75  | 75  |
| 6   | 92  | 84  | 78  | 75  | 90  | 83  | 78  | 74  | 81  | 77  | 74  | 80  | 76  | 73  | 79  | 76  | 73  | 72  | 72  | 72  | 72  |
| 7   | 88  | 80  | 74  | 70  | 87  | 79  | 74  | 70  | 78  | 73  | 70  | 77  | 73  | 70  | 76  | 72  | 69  | 68  | 68  | 68  | 68  |
| 8   | 84  | 76  | 70  | 67  | 83  | 75  | 70  | 67  | 74  | 70  | 66  | 73  | 69  | 66  | 72  | 69  | 66  | 65  | 65  | 65  | 65  |
| 9   | 81  | 72  | 67  | 64  | 80  | 72  | 67  | 63  | 71  | 66  | 63  | 70  | 66  | 63  | 69  | 66  | 63  | 62  | 62  | 62  | 62  |
| 10  | 78  | 69  | 64  | 61  | 77  | 69  | 64  | 61  | 68  | 63  | 60  | 67  | 63  | 60  | 67  | 63  | 60  | 59  | 59  | 59  | 59  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 286078 |
| 5°  | 242368 |
| 10° | 175848 |
| 15° | 132057 |
| 20° | 104195 |
| 25° | 84046  |
| 30° | 62283  |
| 35° | 25233  |
| 40° | 10643  |
| 45° | 5708   |
| 50° | 2562   |
| 55° | 1290   |
| 60° | 826    |
| 65° | 584    |
| 70° | 487    |
| 75° | 322    |
| 80° | 479    |
| 85° | 955    |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 672.3  | 18.7      |
| 10°-20°   | 1161.8 | 32.3      |
| 20°-30°   | 1123.3 | 31.2      |
| 30°-40°   | 493.4  | 13.7      |
| 40°-50°   | 106.7  | 3.0       |
| 50°-60°   | 23.9   | 0.7       |
| 60°-70°   | 8.3    | 0.2       |
| 70°-80°   | 3.2    | 0.1       |
| 80°-90°   | 2.6    | 0.1       |
| 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°    | 2957.4 | 82.3      |
| 0°-40°    | 3450.8 | 96.0      |
| 0°-60°    | 3581.4 | 99.6      |
| 0°-90°    | 3595.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3595.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 9277 |      |
| 5°  | 7830 | 672  |
| 15° | 4137 | 1162 |
| 25° | 2470 | 1123 |
| 35° | 670  | 493  |
| 45° | 131  | 107  |
| 55° | 24   | 24   |
| 65° | 8    | 8    |
| 75° | 3    | 3    |
| 85° | 3    | 3    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 9277.3 |
| 1°    | 9207.8 |
| 2°    | 9018.3 |
| 3°    | 8676.4 |
| 4°    | 8267.8 |
| 5°    | 7829.9 |
| 6°    | 7351.8 |
| 7°    | 6871.2 |
| 8°    | 6419.8 |
| 9°    | 6000.6 |
| 10°   | 5616.0 |
| 11°   | 5252.8 |
| 12°   | 4927.1 |
| 13°   | 4630.7 |
| 14°   | 4369.0 |
| 15°   | 4136.6 |
| 17.5° | 3615.8 |
| 20°   | 3175.2 |
| 22.5° | 2788.0 |
| 25°   | 2470.2 |
| 27.5° | 2147.1 |
| 30°   | 1749.2 |
| 32.5° | 1188.4 |
| 35°   | 670.3  |
| 37.5° | 395.2  |
| 40°   | 264.4  |
| 42.5° | 187.0  |
| 45°   | 130.9  |
| 47.5° | 85.5   |
| 50°   | 53.4   |
| 52.5° | 32.0   |
| 55°   | 24.0   |
| 57.5° | 18.7   |
| 60°   | 13.4   |
| 62.5° | 10.7   |
| 65°   | 8.0    |
| 67.5° | 5.4    |
| 70°   | 5.4    |
| 72.5° | 2.7    |
| 75°   | 2.7    |
| 77.5° | 2.7    |
| 80°   | 2.7    |
| 82.5° | 2.7    |

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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0

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— 0°-180°

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|       |  |     |
|-------|--|-----|
| 85°   |  | 2.7 |
| 87.5° |  | 2.7 |

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(END OF REPORT)