

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: P584680

Luminaire Tested: **HCC8W45D010SL-HM82555835-81NDC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584680  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC8W45D010SL-HM82555835-81NDC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5062.2 lumens  
Efficiency: N/A  
Efficacy: 115.0 lumens/watt  
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.27  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

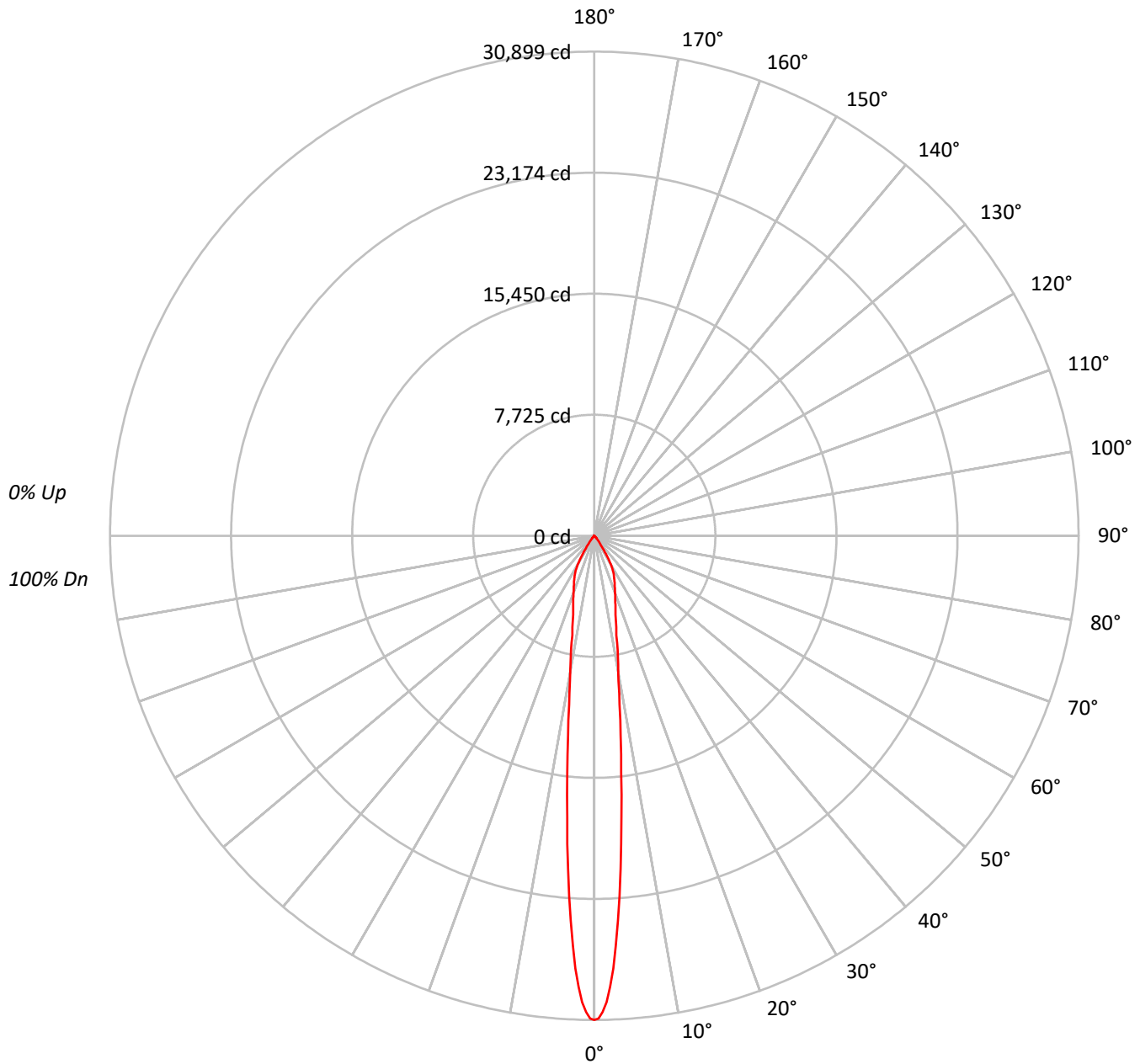
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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**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   | 115 | 112 | 110 | 108 | 112 | 110 | 108 | 107 |  | 106 | 105 | 103 |  |  | 102 | 101 | 100 |  |  | 99  |
| 2   | 110 | 106 | 103 | 100 | 108 | 104 | 101 | 99  |  | 101 | 99  | 97  |  |  | 98  | 96  | 95  |  |  | 96  |
| 3   | 106 | 101 | 97  | 93  | 104 | 99  | 96  | 93  |  | 97  | 94  | 91  |  |  | 95  | 92  | 90  |  |  | 92  |
| 4   | 102 | 96  | 91  | 88  | 100 | 95  | 91  | 88  |  | 93  | 89  | 87  |  |  | 91  | 88  | 86  |  |  | 89  |
| 5   | 98  | 92  | 87  | 83  | 97  | 91  | 86  | 83  |  | 89  | 85  | 82  |  |  | 87  | 84  | 82  |  |  | 86  |
| 6   | 95  | 88  | 83  | 79  | 93  | 87  | 82  | 79  |  | 86  | 82  | 79  |  |  | 84  | 81  | 78  |  |  | 83  |
| 7   | 91  | 84  | 79  | 76  | 90  | 83  | 79  | 76  |  | 82  | 78  | 75  |  |  | 81  | 78  | 75  |  |  | 80  |
| 8   | 88  | 81  | 76  | 73  | 87  | 80  | 76  | 73  |  | 79  | 75  | 72  |  |  | 78  | 75  | 72  |  |  | 77  |
| 9   | 85  | 78  | 73  | 70  | 84  | 77  | 73  | 70  |  | 76  | 72  | 70  |  |  | 76  | 72  | 69  |  |  | 75  |
| 10  | 83  | 75  | 70  | 67  | 82  | 75  | 70  | 67  |  | 74  | 70  | 67  |  |  | 73  | 69  | 67  |  |  | 73  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 952808 |
| 5°  | 611152 |
| 10° | 276081 |
| 15° | 166580 |
| 20° | 126940 |
| 25° | 102511 |
| 30° | 75116  |
| 35° | 27202  |
| 40° | 10152  |
| 45° | 4609   |
| 50° | 1468   |
| 55° | 366    |
| 60° | 210    |
| 65° | 248    |
| 70° | 0      |
| 75° | 0      |
| 80° | 604    |
| 85° | 1203   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1505.8 | 29.7      |
| 10°-20°   | 1529.5 | 30.2      |
| 20°-30°   | 1369.2 | 27.0      |
| 30°-40°   | 551.5  | 10.9      |
| 40°-50°   | 90.4   | 1.8       |
| 50°-60°   | 8.2    | 0.2       |
| 60°-70°   | 2.9    | 0.1       |
| 70°-80°   | 2.3    | 0.0       |
| 80°-90°   | 3.2    | 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°    | 4404.5 | 87.0      |
| 0°-40°    | 4956.0 | 97.9      |
| 0°-60°    | 5054.6 | 99.9      |
| 0°-90°    | 5063.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5062.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | Flux |
|-----|-------|------|
| 0°  | 30899 |      |
| 5°  | 19744 | ###  |
| 15° | 5218  | 1529 |
| 25° | 3013  | 1369 |
| 35° | 723   | 552  |
| 45° | 106   | 90   |
| 55° | 7     | 8    |
| 65° | 3     | 3    |
| 75° | 0     | 2    |
| 85° | 3     | 3    |
| 90° | 0     |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      |
|-------|---------|
| 0°    | 30898.9 |
| 0.5°  | 30803.4 |
| 1°    | 30404.7 |
| 1.5°  | 29763.9 |
| 2°    | 28792.6 |
| 2.5°  | 27644.1 |
| 3°    | 26205.8 |
| 3.5°  | 24627.7 |
| 4°    | 23066.8 |
| 4.5°  | 21318.3 |
| 5°    | 19743.8 |
| 5.5°  | 18029.5 |
| 6°    | 16638.9 |
| 6.5°  | 15190.5 |
| 7°    | 14052.1 |
| 7.5°  | 12848.9 |
| 8°    | 11881.1 |
| 8.5°  | 10909.7 |
| 9°    | 10180.3 |
| 9.5°  | 9376.0  |
| 10°   | 8817.1  |
| 12.5° | 6502.9  |
| 15°   | 5218.0  |
| 17.5° | 4458.0  |
| 20°   | 3868.3  |
| 22.5° | 3397.9  |
| 25°   | 3012.9  |
| 27.5° | 2627.8  |
| 30°   | 2109.6  |
| 32.5° | 1356.5  |
| 35°   | 722.6   |
| 37.5° | 398.7   |
| 40°   | 252.2   |
| 42.5° | 167.0   |
| 45°   | 105.7   |
| 47.5° | 64.7    |
| 50°   | 30.6    |
| 52.5° | 10.2    |
| 55°   | 6.8     |
| 57.5° | 3.4     |
| 60°   | 3.4     |
| 62.5° | 3.4     |
| 65°   | 3.4     |



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CANDELA DISTRIBUTION (continued):

|       | 0°  |
|-------|-----|
| 72.5° | 0.0 |
| 75°   | 0.0 |
| 77.5° | 3.4 |
| 80°   | 3.4 |
| 82.5° | 3.4 |
| 85°   | 3.4 |
| 87.5° | 3.4 |
| 90°   | 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

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## Scaled Data Report



— 0°-180°

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Scaled Data Report



|       |     |
|-------|-----|
| 67.5° | 3.4 |
| 70°   | 0.0 |

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Scaled Data Report



(END OF REPORT)