

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: P584681

Luminaire Tested: **HCC8W45D010MW-HM82555835-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584681  
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-HM82555835-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4615.5 lumens  
Efficiency: N/A  
Efficacy: 104.9 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

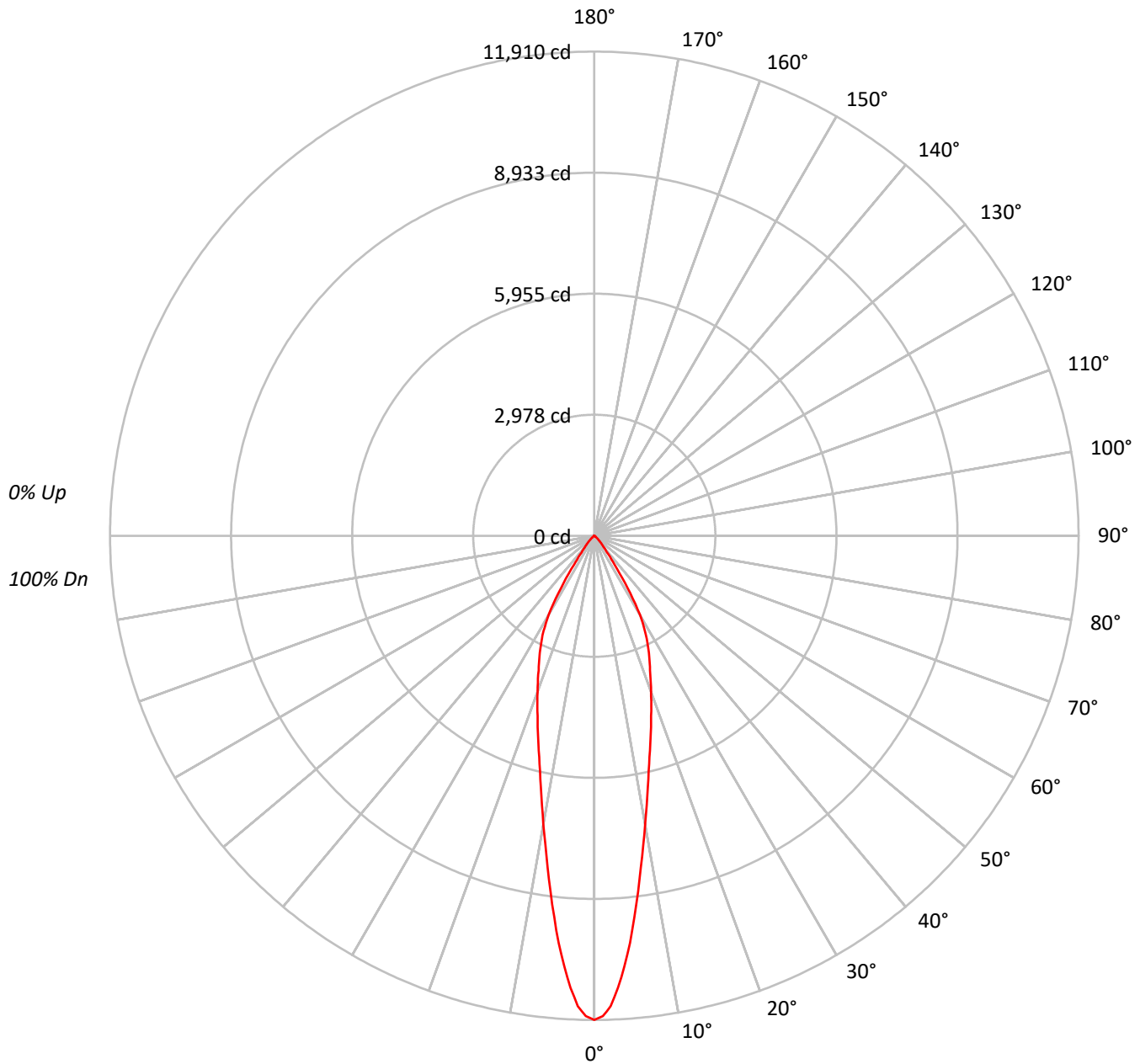
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 30  | 10  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 114 | 112 | 109 | 107 | 112 | 109 | 107 | 106 | 105 | 104 | 102 | 102 | 100 | 99  | 98  | 97  | 96  | 95  |    |    |
| 2   | 109 | 105 | 101 | 98  | 107 | 103 | 100 | 97  | 100 | 97  | 95  | 97  | 95  | 93  | 94  | 92  | 91  | 89  |    |    |
| 3   | 104 | 99  | 94  | 91  | 102 | 97  | 93  | 90  | 95  | 91  | 88  | 92  | 90  | 87  | 90  | 88  | 86  | 84  |    |    |
| 4   | 100 | 93  | 88  | 84  | 98  | 92  | 87  | 84  | 90  | 86  | 83  | 88  | 85  | 82  | 86  | 83  | 81  | 80  |    |    |
| 5   | 96  | 88  | 83  | 79  | 94  | 87  | 82  | 79  | 86  | 81  | 78  | 84  | 80  | 77  | 82  | 79  | 77  | 75  |    |    |
| 6   | 92  | 84  | 78  | 75  | 90  | 83  | 78  | 74  | 81  | 77  | 74  | 80  | 76  | 73  | 79  | 76  | 73  | 72  |    |    |
| 7   | 88  | 80  | 74  | 70  | 87  | 79  | 74  | 70  | 78  | 73  | 70  | 77  | 73  | 70  | 76  | 72  | 69  | 68  |    |    |
| 8   | 84  | 76  | 71  | 67  | 83  | 75  | 70  | 67  | 74  | 70  | 66  | 73  | 69  | 66  | 72  | 69  | 66  | 65  |    |    |
| 9   | 81  | 72  | 67  | 64  | 80  | 72  | 67  | 63  | 71  | 66  | 63  | 70  | 66  | 63  | 69  | 66  | 63  | 62  |    |    |
| 10  | 78  | 69  | 64  | 61  | 77  | 69  | 64  | 61  | 68  | 63  | 60  | 67  | 63  | 60  | 67  | 63  | 60  | 59  |    |    |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 367267 |
| 5°  | 311151 |
| 10° | 225753 |
| 15° | 169533 |
| 20° | 133765 |
| 25° | 107897 |
| 30° | 79958  |
| 35° | 32393  |
| 40° | 13666  |
| 45° | 7326   |
| 50° | 3291   |
| 55° | 1656   |
| 60° | 1055   |
| 65° | 752    |
| 70° | 613    |
| 75° | 405    |
| 80° | 604    |
| 85° | 1203   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 863.1  | 18.7      |
| 10°-20°   | 1491.5 | 32.3      |
| 20°-30°   | 1442.1 | 31.2      |
| 30°-40°   | 633.4  | 13.7      |
| 40°-50°   | 136.9  | 3.0       |
| 50°-60°   | 30.8   | 0.7       |
| 60°-70°   | 10.5   | 0.2       |
| 70°-80°   | 4.0    | 0.1       |
| 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°    | 3796.7 | 82.3      |
| 0°-40°    | 4430.1 | 96.0      |
| 0°-60°    | 4597.7 | 99.6      |
| 0°-90°    | 4615.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4615.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | Flux |
|-----|-------|------|
| 0°  | 11910 |      |
| 5°  | 10052 | 863  |
| 15° | 5310  | 1492 |
| 25° | 3171  | 1442 |
| 35° | 860   | 633  |
| 45° | 168   | 137  |
| 55° | 31    | 31   |
| 65° | 10    | 11   |
| 75° | 3     | 4    |
| 85° | 3     | 3    |
| 90° | 0     |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      |
|-------|---------|
| 0°    | 11910.2 |
| 1°    | 11821.0 |
| 2°    | 11577.6 |
| 3°    | 11138.8 |
| 4°    | 10614.2 |
| 5°    | 10052.0 |
| 6°    | 9438.3  |
| 7°    | 8821.2  |
| 8°    | 8241.8  |
| 9°    | 7703.6  |
| 10°   | 7209.8  |
| 11°   | 6743.6  |
| 12°   | 6325.4  |
| 13°   | 5944.8  |
| 14°   | 5608.8  |
| 15°   | 5310.5  |
| 17.5° | 4642.0  |
| 20°   | 4076.3  |
| 22.5° | 3579.2  |
| 25°   | 3171.2  |
| 27.5° | 2756.4  |
| 30°   | 2245.6  |
| 32.5° | 1525.6  |
| 35°   | 860.5   |
| 37.5° | 507.4   |
| 40°   | 339.5   |
| 42.5° | 240.0   |
| 45°   | 168.0   |
| 47.5° | 109.7   |
| 50°   | 68.6    |
| 52.5° | 41.2    |
| 55°   | 30.8    |
| 57.5° | 24.0    |
| 60°   | 17.1    |
| 62.5° | 13.7    |
| 65°   | 10.3    |
| 67.5° | 6.8     |
| 70°   | 6.8     |
| 72.5° | 3.4     |
| 75°   | 3.4     |
| 77.5° | 3.4     |
| 80°   | 3.4     |
| 82.5° | 3.4     |

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CANDELA DISTRIBUTION (continued):

0°  
90° | 0.0

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## Scaled Data Report



— 0°-180°

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|       |     |
|-------|-----|
| 85°   | 3.4 |
| 87.5° | 3.4 |

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Scaled Data Report



(END OF REPORT)