

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: P584713

Luminaire Tested: **HCC8S45D010BZ-HM82555927-81MDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584713  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC8S45D010BZ-HM82555927-81MDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, WHITE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

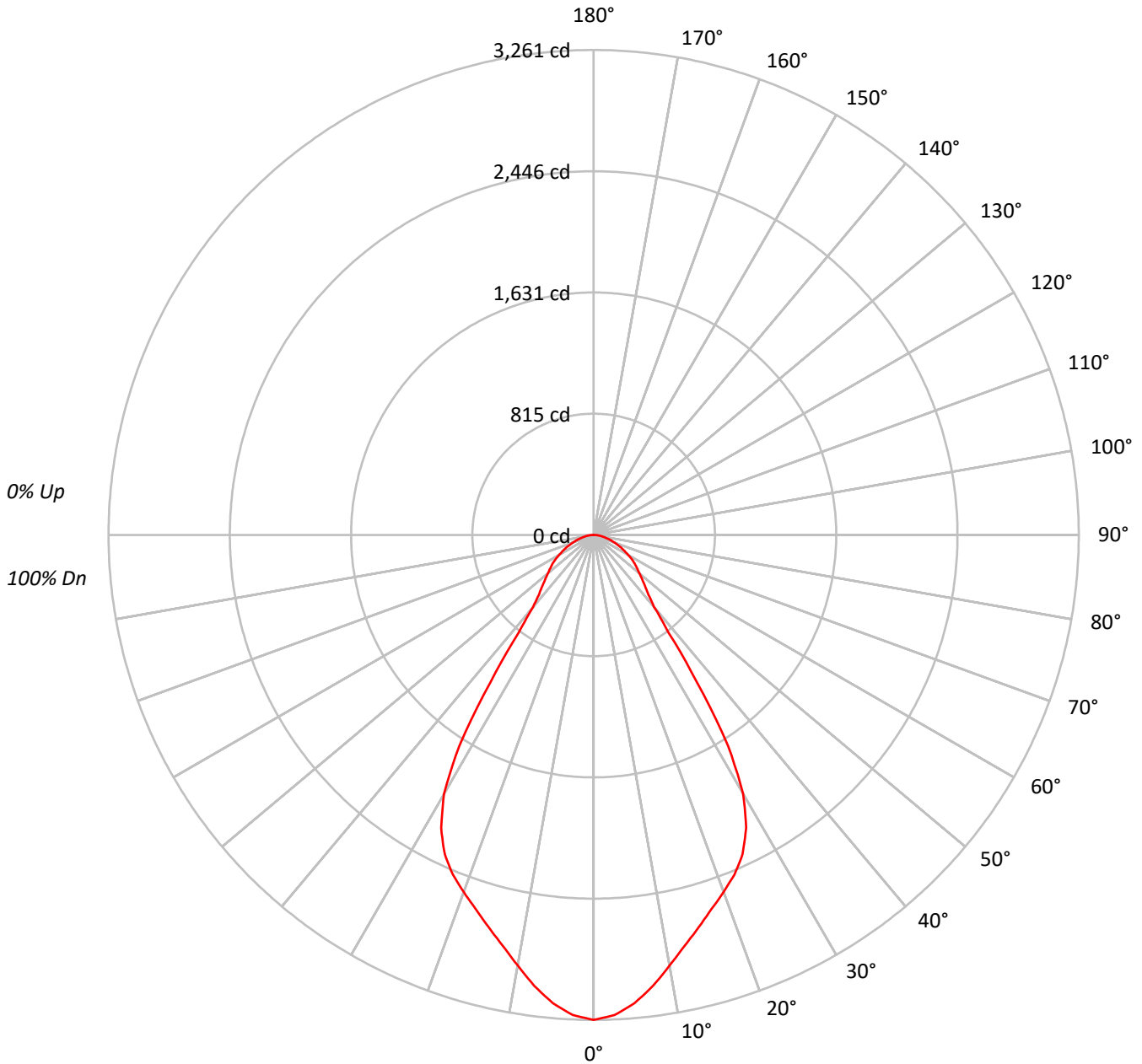
Lumens per Lamp: N/A  
Luminaire Lumens: 3932.5 lumens  
Efficiency: N/A  
Efficacy: 89.4 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1 / 0.95  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

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





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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 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99  | 97  | 98  | 96  | 94  | 94  | 93  | 92  | 90  |    |    |
| 2   | 104 | 98  | 93  | 89  | 102 | 96  | 92  | 88  | 93  | 89  | 86  | 90  | 87  | 84  | 87  | 84  | 82  | 80  |    |    |
| 3   | 98  | 89  | 83  | 78  | 95  | 88  | 82  | 78  | 85  | 80  | 76  | 83  | 78  | 75  | 80  | 77  | 74  | 72  |    |    |
| 4   | 91  | 82  | 75  | 70  | 89  | 81  | 74  | 69  | 78  | 73  | 69  | 76  | 72  | 68  | 74  | 70  | 67  | 65  |    |    |
| 5   | 86  | 76  | 68  | 63  | 84  | 75  | 68  | 63  | 73  | 67  | 62  | 71  | 66  | 62  | 69  | 65  | 61  | 59  |    |    |
| 6   | 81  | 70  | 63  | 58  | 79  | 69  | 62  | 57  | 67  | 61  | 57  | 66  | 61  | 56  | 64  | 60  | 56  | 54  |    |    |
| 7   | 76  | 65  | 58  | 53  | 74  | 64  | 57  | 53  | 63  | 57  | 52  | 62  | 56  | 52  | 60  | 55  | 52  | 50  |    |    |
| 8   | 72  | 61  | 54  | 49  | 70  | 60  | 53  | 49  | 59  | 53  | 48  | 58  | 52  | 48  | 57  | 52  | 48  | 46  |    |    |
| 9   | 68  | 57  | 50  | 45  | 67  | 56  | 50  | 45  | 55  | 49  | 45  | 54  | 49  | 45  | 53  | 48  | 45  | 43  |    |    |
| 10  | 64  | 53  | 46  | 42  | 63  | 53  | 46  | 42  | 52  | 46  | 42  | 51  | 46  | 42  | 50  | 45  | 42  | 40  |    |    |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 100554 |
| 5°  | 97812  |
| 10° | 92042  |
| 15° | 87146  |
| 20° | 83830  |
| 25° | 80590  |
| 30° | 71577  |
| 35° | 45583  |
| 40° | 25440  |
| 45° | 21307  |
| 50° | 19232  |
| 55° | 18128  |
| 60° | 16534  |
| 65° | 14921  |
| 70° | 13163  |
| 75° | 11712  |
| 80° | 10371  |
| 85° | 9376   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 294.6  | 7.5       |
| 10°-20°   | 769.9  | 19.6      |
| 20°-30°   | 1074.0 | 27.3      |
| 30°-40°   | 772.8  | 19.7      |
| 40°-50°   | 383.0  | 9.7       |
| 50°-60°   | 299.6  | 7.6       |
| 60°-70°   | 202.8  | 5.2       |
| 70°-80°   | 105.4  | 2.7       |
| 80°-90°   | 30.3   | 0.8       |
| 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°    | 2138.5 | 54.4      |
| 0°-40°    | 2911.3 | 74.0      |
| 0°-60°    | 3593.9 | 91.4      |
| 0°-90°    | 3932.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3932.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 3261 |      |
| 5°  | 3160 | 295  |
| 15° | 2730 | 770  |
| 25° | 2369 | 1074 |
| 35° | 1211 | 773  |
| 45° | 489  | 383  |
| 55° | 337  | 300  |
| 65° | 204  | 203  |
| 75° | 98   | 105  |
| 85° | 26   | 30   |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 3260.9 |
| 2.5°  | 3231.7 |
| 5°    | 3159.9 |
| 7.5°  | 3059.1 |
| 10°   | 2939.5 |
| 12.5° | 2828.1 |
| 15°   | 2729.8 |
| 17.5° | 2636.9 |
| 20°   | 2554.6 |
| 22.5° | 2472.2 |
| 25°   | 2368.6 |
| 27.5° | 2220.0 |
| 30°   | 2010.2 |
| 32.5° | 1680.9 |
| 35°   | 1210.9 |
| 37.5° | 825.8  |
| 40°   | 632.0  |
| 42.5° | 544.4  |
| 45°   | 488.6  |
| 47.5° | 440.8  |
| 50°   | 400.9  |
| 52.5° | 366.4  |
| 55°   | 337.2  |
| 57.5° | 302.8  |
| 60°   | 268.1  |
| 62.5° | 233.7  |
| 65°   | 204.5  |
| 67.5° | 175.2  |
| 70°   | 146.0  |
| 72.5° | 122.1  |
| 75°   | 98.3   |
| 77.5° | 77.1   |
| 80°   | 58.4   |
| 82.5° | 42.5   |
| 85°   | 26.5   |
| 87.5° | 13.3   |
| 90°   | 0.0    |

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— 0°-180°

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