

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: P584669

Luminaire Tested: **HCC8S45D010BZ-HM82555830-81WDBB**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584669  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC8S45D010BZ-HM82555830-81WDBB  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

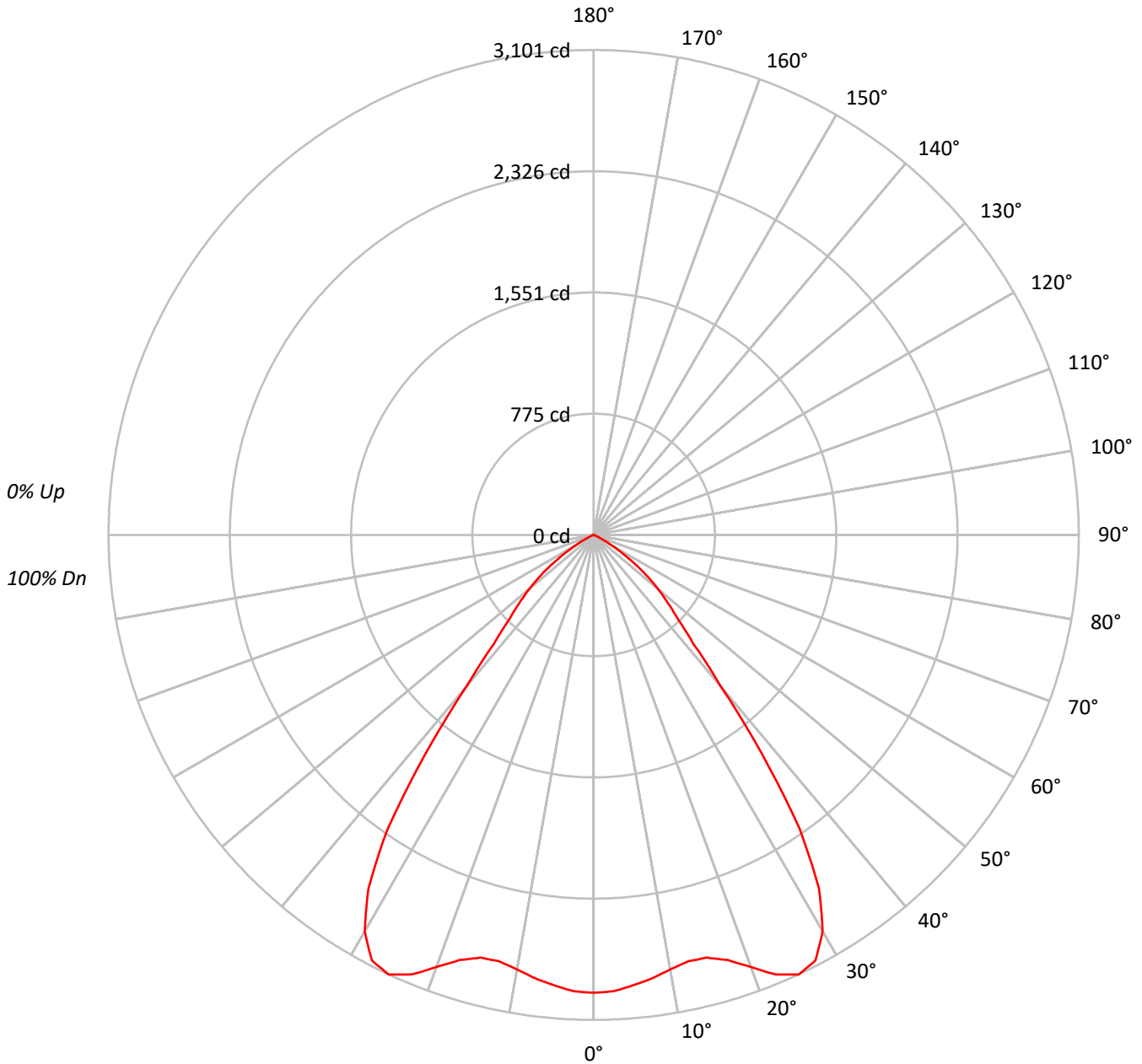
Lumens per Lamp: N/A  
Luminaire Lumens: 4817.4 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.32 / 1.13  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 113 | 109 | 107 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99  | 99  | 98  | 96  | 96  | 95  | 93  | 92  |
| 2   | 106 | 100 | 95  | 92  | 104 | 98  | 94  | 91  | 95  | 92  | 89  | 92  | 89  | 87  | 89  | 87  | 85  | 83  |
| 3   | 99  | 92  | 86  | 81  | 97  | 90  | 85  | 81  | 88  | 83  | 79  | 85  | 81  | 78  | 83  | 80  | 77  | 75  |
| 4   | 93  | 84  | 78  | 73  | 91  | 83  | 77  | 72  | 81  | 76  | 71  | 79  | 74  | 71  | 77  | 73  | 70  | 68  |
| 5   | 87  | 77  | 71  | 66  | 85  | 76  | 70  | 65  | 74  | 69  | 65  | 73  | 68  | 64  | 71  | 67  | 63  | 62  |
| 6   | 82  | 71  | 64  | 59  | 80  | 70  | 64  | 59  | 69  | 63  | 59  | 67  | 62  | 58  | 66  | 61  | 58  | 56  |
| 7   | 77  | 66  | 59  | 54  | 75  | 65  | 59  | 54  | 64  | 58  | 54  | 63  | 57  | 53  | 61  | 57  | 53  | 51  |
| 8   | 72  | 61  | 54  | 49  | 71  | 61  | 54  | 49  | 59  | 53  | 49  | 58  | 53  | 49  | 57  | 52  | 49  | 47  |
| 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  | 45  | 42  | 50  | 45  | 41  | 40  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 90261  |
| 5°  | 89510  |
| 10° | 88328  |
| 15° | 89336  |
| 20° | 96474  |
| 25° | 105502 |
| 30° | 104224 |
| 35° | 86454  |
| 40° | 50885  |
| 45° | 33243  |
| 50° | 25766  |
| 55° | 17123  |
| 60° | 8332   |
| 65° | 2583   |
| 70° | 866    |
| 75° | 774    |
| 80° | 568    |
| 85° | 1132   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 273.9  | 5.7       |
| 10°-20°   | 804.0  | 16.7      |
| 20°-30°   | 1405.7 | 29.2      |
| 30°-40°   | 1367.3 | 28.4      |
| 40°-50°   | 621.8  | 12.9      |
| 50°-60°   | 288.3  | 6.0       |
| 60°-70°   | 48.3   | 1.0       |
| 70°-80°   | 6.0    | 0.1       |
| 80°-90°   | 2.2    | 0.0       |
| 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°    | 2483.5 | 51.6      |
| 0°-40°    | 3850.8 | 79.9      |
| 0°-60°    | 4761.0 | 98.8      |
| 0°-90°    | 4817.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4817.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2927 |      |
| 5°  | 2892 | 274  |
| 15° | 2798 | 804  |
| 25° | 3101 | 1406 |
| 35° | 2297 | 1367 |
| 45° | 762  | 622  |
| 55° | 318  | 288  |
| 65° | 35   | 48   |
| 75° | 6    | 6    |
| 85° | 3    | 2    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 2927.1 |
| 2.5°  | 2920.7 |
| 5°    | 2891.7 |
| 7.5°  | 2859.5 |
| 10°   | 2820.9 |
| 12.5° | 2792.0 |
| 15°   | 2798.4 |
| 17.5° | 2849.9 |
| 20°   | 2939.9 |
| 22.5° | 3042.9 |
| 25°   | 3100.8 |
| 27.5° | 3068.6 |
| 30°   | 2927.1 |
| 32.5° | 2679.4 |
| 35°   | 2296.6 |
| 37.5° | 1769.1 |
| 40°   | 1264.1 |
| 42.5° | 942.5  |
| 45°   | 762.3  |
| 47.5° | 643.3  |
| 50°   | 537.1  |
| 52.5° | 427.8  |
| 55°   | 318.5  |
| 57.5° | 218.8  |
| 60°   | 135.1  |
| 62.5° | 74.0   |
| 65°   | 35.4   |
| 67.5° | 16.1   |
| 70°   | 9.6    |
| 72.5° | 6.5    |
| 75°   | 6.5    |
| 77.5° | 3.2    |
| 80°   | 3.2    |
| 82.5° | 3.2    |
| 85°   | 3.2    |
| 87.5° | 0.0    |
| 90°   | 0.0    |

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Scaled Data Report



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— 0°-180°

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