

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: P584686

Luminaire Tested: **HCC8S45D010BZ-HM82555835-81WDBB**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584686  
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-HM82555835-81WDBB  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, BLACK BAFFLE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5106.5 lumens  
Efficiency: N/A  
Efficacy: 116.1 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

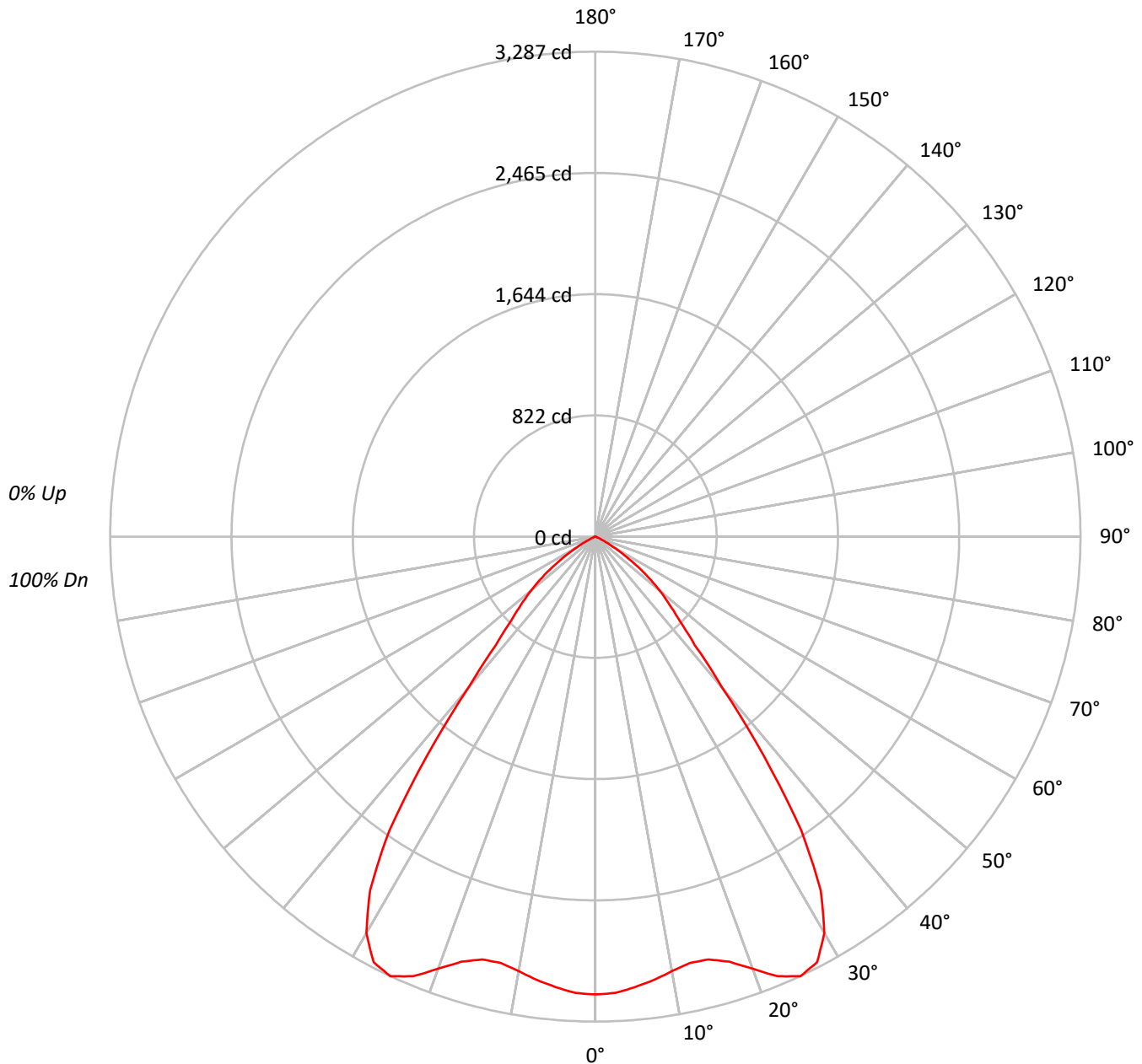
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |
| RCR |     |     |     |     |  |     |     |     |     |  |     |     |     |  |     |     |     |  |     |     |     |
| 0   | 119 | 119 | 119 | 119 |  | 116 | 116 | 116 | 116 |  | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 |
| 1   | 113 | 109 | 107 | 104 |  | 110 | 107 | 105 | 102 |  | 103 | 101 | 99  |  | 99  | 98  | 96  |  | 96  | 95  | 93  |
| 2   | 106 | 100 | 95  | 92  |  | 104 | 98  | 94  | 91  |  | 95  | 92  | 89  |  | 92  | 89  | 87  |  | 89  | 87  | 85  |
| 3   | 99  | 92  | 86  | 81  |  | 97  | 90  | 85  | 81  |  | 88  | 83  | 79  |  | 85  | 81  | 78  |  | 83  | 80  | 77  |
| 4   | 93  | 84  | 78  | 73  |  | 91  | 83  | 77  | 72  |  | 81  | 76  | 71  |  | 79  | 74  | 71  |  | 77  | 73  | 70  |
| 5   | 87  | 77  | 71  | 66  |  | 85  | 76  | 70  | 65  |  | 74  | 69  | 65  |  | 73  | 68  | 64  |  | 71  | 67  | 63  |
| 6   | 82  | 71  | 64  | 59  |  | 80  | 70  | 64  | 59  |  | 69  | 63  | 59  |  | 67  | 62  | 58  |  | 66  | 61  | 58  |
| 7   | 77  | 66  | 59  | 54  |  | 75  | 65  | 59  | 54  |  | 64  | 58  | 54  |  | 63  | 57  | 53  |  | 61  | 57  | 53  |
| 8   | 72  | 61  | 54  | 49  |  | 71  | 61  | 54  | 49  |  | 59  | 53  | 49  |  | 58  | 53  | 49  |  | 57  | 52  | 49  |
| 9   | 68  | 57  | 50  | 45  |  | 67  | 56  | 50  | 45  |  | 55  | 49  | 45  |  | 54  | 49  | 45  |  | 53  | 48  | 45  |
| 10  | 64  | 53  | 46  | 42  |  | 63  | 53  | 46  | 42  |  | 52  | 46  | 42  |  | 51  | 45  | 42  |  | 50  | 45  | 41  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 95676  |
| 5°  | 94884  |
| 10° | 93629  |
| 15° | 94700  |
| 20° | 102266 |
| 25° | 111834 |
| 30° | 110477 |
| 35° | 91641  |
| 40° | 53940  |
| 45° | 35241  |
| 50° | 27316  |
| 55° | 18150  |
| 60° | 8832   |
| 65° | 2736   |
| 70° | 920    |
| 75° | 810    |
| 80° | 604    |
| 85° | 1203   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 290.3  | 5.7       |
| 10°-20°   | 852.2  | 16.7      |
| 20°-30°   | 1490.0 | 29.2      |
| 30°-40°   | 1449.4 | 28.4      |
| 40°-50°   | 659.2  | 12.9      |
| 50°-60°   | 305.6  | 6.0       |
| 60°-70°   | 51.2   | 1.0       |
| 70°-80°   | 6.3    | 0.1       |
| 80°-90°   | 2.3    | 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°    | 2632.5 | 51.6      |
| 0°-40°    | 4081.9 | 79.9      |
| 0°-60°    | 5046.7 | 98.8      |
| 0°-90°    | 5106.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5106.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 3103 |      |
| 5°  | 3065 | 290  |
| 15° | 2966 | 852  |
| 25° | 3287 | 1490 |
| 35° | 2434 | 1449 |
| 45° | 808  | 659  |
| 55° | 338  | 306  |
| 65° | 38   | 51   |
| 75° | 7    | 6    |
| 85° | 3    | 2    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 3102.7 |
| 2.5°  | 3095.9 |
| 5°    | 3065.3 |
| 7.5°  | 3031.1 |
| 10°   | 2990.2 |
| 12.5° | 2959.6 |
| 15°   | 2966.4 |
| 17.5° | 3020.9 |
| 20°   | 3116.4 |
| 22.5° | 3225.5 |
| 25°   | 3286.9 |
| 27.5° | 3252.7 |
| 30°   | 3102.7 |
| 32.5° | 2840.2 |
| 35°   | 2434.4 |
| 37.5° | 1875.3 |
| 40°   | 1340.0 |
| 42.5° | 999.0  |
| 45°   | 808.1  |
| 47.5° | 682.0  |
| 50°   | 569.4  |
| 52.5° | 453.5  |
| 55°   | 337.6  |
| 57.5° | 231.9  |
| 60°   | 143.2  |
| 62.5° | 78.5   |
| 65°   | 37.5   |
| 67.5° | 17.0   |
| 70°   | 10.2   |
| 72.5° | 6.8    |
| 75°   | 6.8    |
| 77.5° | 3.4    |
| 80°   | 3.4    |
| 82.5° | 3.4    |
| 85°   | 3.4    |
| 87.5° | 0.0    |
| 90°   | 0.0    |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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Peachtree City, GA 30269

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## Scaled Data Report



— 0°-180°

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