

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: P584763

Luminaire Tested: **HCC8S45D010BZ-HM82555940-81MDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584763  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC8S45D010BZ-HM82555940-81MDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5190.0 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.81  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

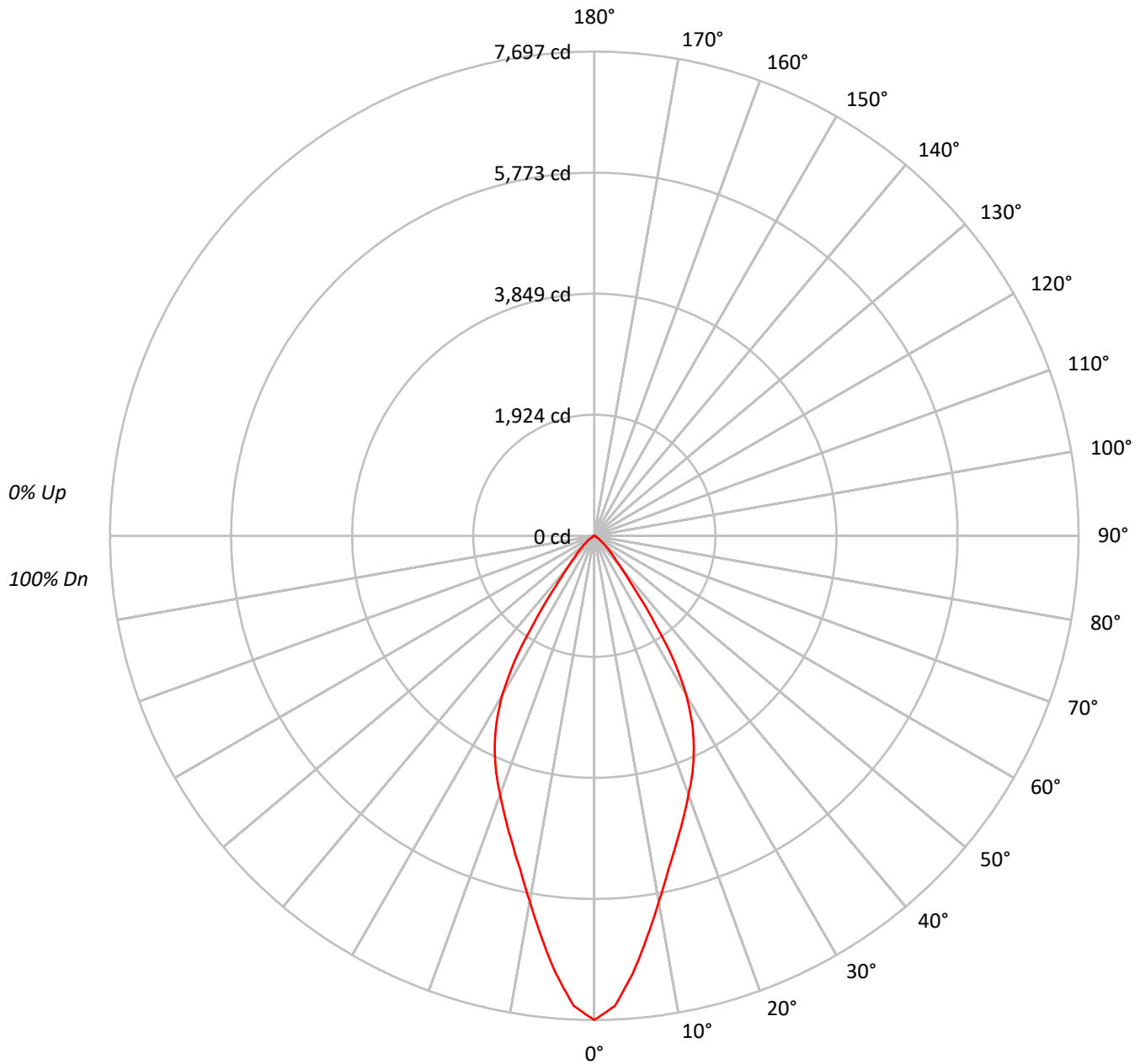
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |
| 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   | 114 | 111 | 108 | 106 |  | 111 | 109 | 106 | 104 |  | 105 | 103 | 101 |  | 101 | 99  | 98  |  | 97  | 96  | 95  |
| 2   | 108 | 103 | 99  | 96  |  | 106 | 101 | 98  | 95  |  | 98  | 95  | 93  |  | 95  | 93  | 91  |  | 92  | 90  | 89  |
| 3   | 103 | 96  | 91  | 87  |  | 101 | 95  | 90  | 87  |  | 92  | 88  | 85  |  | 90  | 87  | 84  |  | 88  | 85  | 83  |
| 4   | 97  | 90  | 85  | 80  |  | 96  | 89  | 84  | 80  |  | 87  | 82  | 79  |  | 85  | 81  | 78  |  | 83  | 80  | 77  |
| 5   | 93  | 84  | 79  | 74  |  | 91  | 83  | 78  | 74  |  | 82  | 77  | 73  |  | 80  | 76  | 73  |  | 78  | 75  | 72  |
| 6   | 88  | 79  | 73  | 69  |  | 87  | 78  | 73  | 69  |  | 77  | 72  | 68  |  | 76  | 71  | 68  |  | 74  | 70  | 67  |
| 7   | 84  | 75  | 69  | 64  |  | 82  | 74  | 68  | 64  |  | 73  | 68  | 64  |  | 71  | 67  | 64  |  | 70  | 66  | 63  |
| 8   | 80  | 70  | 64  | 60  |  | 79  | 70  | 64  | 60  |  | 69  | 64  | 60  |  | 68  | 63  | 60  |  | 67  | 63  | 60  |
| 9   | 76  | 67  | 61  | 57  |  | 75  | 66  | 61  | 57  |  | 65  | 60  | 56  |  | 64  | 60  | 56  |  | 63  | 59  | 56  |
| 10  | 73  | 63  | 57  | 54  |  | 72  | 63  | 57  | 53  |  | 62  | 57  | 53  |  | 61  | 56  | 53  |  | 60  | 56  | 53  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 237353 |
| 5°  | 216295 |
| 10° | 184807 |
| 15° | 161166 |
| 20° | 143646 |
| 25° | 127420 |
| 30° | 104324 |
| 35° | 59907  |
| 40° | 26588  |
| 45° | 15473  |
| 50° | 8933   |
| 55° | 5102   |
| 60° | 2812   |
| 65° | 1795   |
| 70° | 1271   |
| 75° | 834    |
| 80° | 622    |
| 85° | 1238   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 632.5  | 12.2      |
| 10°-20°   | 1419.1 | 27.3      |
| 20°-30°   | 1698.6 | 32.7      |
| 30°-40°   | 1027.6 | 19.8      |
| 40°-50°   | 288.0  | 5.5       |
| 50°-60°   | 89.4   | 1.7       |
| 60°-70°   | 25.6   | 0.5       |
| 70°-80°   | 6.9    | 0.1       |
| 80°-90°   | 2.4    | 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°    | 3750.2 | 72.3      |
| 0°-40°    | 4777.8 | 92.1      |
| 0°-60°    | 5155.2 | 99.3      |
| 0°-90°    | 5190.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5190.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 7697 |      |
| 5°  | 6988 | 633  |
| 15° | 5048 | 1419 |
| 25° | 3745 | 1699 |
| 35° | 1591 | 1028 |
| 45° | 355  | 288  |
| 55° | 95   | 89   |
| 65° | 25   | 26   |
| 75° | 7    | 7    |
| 85° | 4    | 2    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 7697.2 |
| 2.5°  | 7479.4 |
| 5°    | 6987.6 |
| 7.5°  | 6432.5 |
| 10°   | 5902.1 |
| 12.5° | 5438.3 |
| 15°   | 5048.4 |
| 17.5° | 4704.1 |
| 20°   | 4377.4 |
| 22.5° | 4075.2 |
| 25°   | 3745.0 |
| 27.5° | 3372.6 |
| 30°   | 2929.9 |
| 32.5° | 2357.3 |
| 35°   | 1591.4 |
| 37.5° | 990.7  |
| 40°   | 660.5  |
| 42.5° | 474.2  |
| 45°   | 354.8  |
| 47.5° | 259.9  |
| 50°   | 186.2  |
| 52.5° | 130.0  |
| 55°   | 94.9   |
| 57.5° | 63.2   |
| 60°   | 45.6   |
| 62.5° | 31.7   |
| 65°   | 24.6   |
| 67.5° | 17.6   |
| 70°   | 14.1   |
| 72.5° | 7.0    |
| 75°   | 7.0    |
| 77.5° | 3.5    |
| 80°   | 3.5    |
| 82.5° | 3.5    |
| 85°   | 3.5    |
| 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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