

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: P583599

Luminaire Tested: **HC807D010-HM80520835-81PSMDW**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P583599  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC807D010-HM80520835-81PSMDW  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" PLASTIC TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 962.9 lumens  
Efficiency: N/A  
Efficacy: 120.4 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.06 / 0.97  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

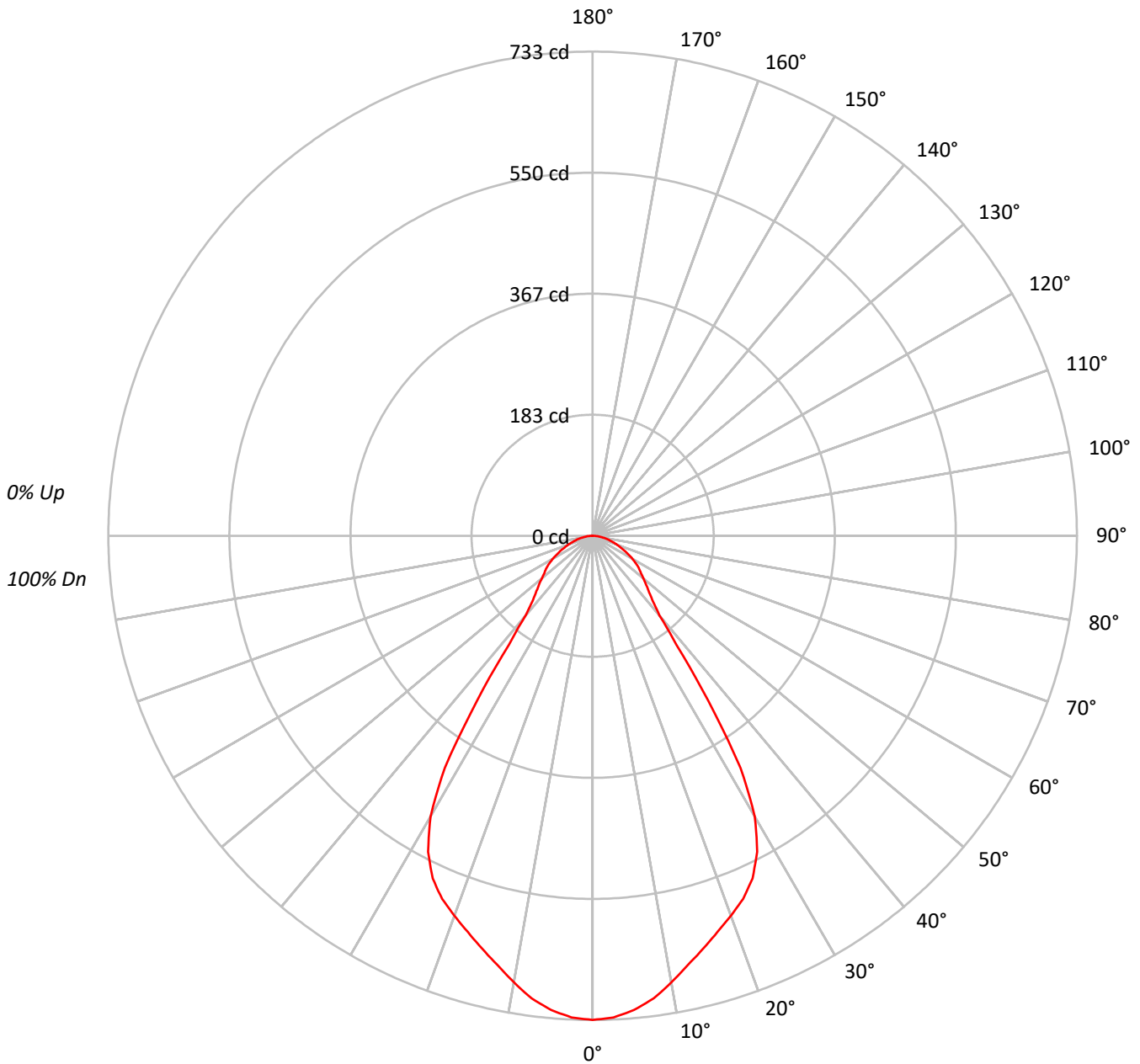
Input Watts (W): 8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P583599

CATALOG NUMBER: HC807D010-HM80520835-81PSMDW

### Luminous Intensity Polar Plot





TEST NUMBER: P583599

CATALOG NUMBER: HC807D010-HM80520835-81PSMDW

**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 | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    | 100 |
| 1   | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 101 | 99  | 97  | 98  | 96  | 94  | 94  | 93  | 91  | 89  |    |    | 89  |
| 2   | 104 | 98  | 92  | 88  | 102 | 96  | 91  | 87  | 92  | 88  | 85  | 89  | 86  | 83  | 86  | 84  | 81  | 79  |    |    | 79  |
| 3   | 97  | 89  | 83  | 77  | 95  | 87  | 82  | 77  | 85  | 80  | 76  | 82  | 78  | 74  | 80  | 76  | 73  | 71  |    |    | 71  |
| 4   | 91  | 81  | 74  | 69  | 89  | 80  | 74  | 69  | 78  | 72  | 68  | 76  | 71  | 67  | 74  | 70  | 66  | 64  |    |    | 64  |
| 5   | 85  | 75  | 68  | 62  | 83  | 74  | 67  | 62  | 72  | 66  | 61  | 70  | 65  | 61  | 68  | 64  | 60  | 58  |    |    | 58  |
| 6   | 80  | 69  | 62  | 57  | 78  | 68  | 61  | 56  | 67  | 61  | 56  | 65  | 60  | 56  | 64  | 59  | 55  | 53  |    |    | 53  |
| 7   | 75  | 64  | 57  | 52  | 74  | 63  | 57  | 52  | 62  | 56  | 51  | 61  | 55  | 51  | 60  | 55  | 51  | 49  |    |    | 49  |
| 8   | 71  | 60  | 53  | 48  | 70  | 59  | 52  | 48  | 58  | 52  | 47  | 57  | 51  | 47  | 56  | 51  | 47  | 45  |    |    | 45  |
| 9   | 67  | 56  | 49  | 44  | 66  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 52  | 47  | 44  | 42  |    |    | 42  |
| 10  | 64  | 52  | 46  | 41  | 62  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 49  | 44  | 41  | 39  |    |    | 39  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 22603 |
| 5°  | 22309 |
| 10° | 21493 |
| 15° | 20652 |
| 20° | 20083 |
| 25° | 19475 |
| 30° | 17476 |
| 35° | 11459 |
| 40° | 6336  |
| 45° | 5281  |
| 50° | 4816  |
| 55° | 4591  |
| 60° | 4274  |
| 65° | 3874  |
| 70° | 3498  |
| 75° | 3157  |
| 80° | 2859  |
| 85° | 2760  |



TEST NUMBER: P583599

CATALOG NUMBER: HC807D010-HM80520835-81PSMDW

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 67.7   | 7.0       |
| 10°-20°   | 182.5  | 19.0      |
| 20°-30°   | 259.7  | 27.0      |
| 30°-40°   | 192.2  | 20.0      |
| 40°-50°   | 95.2   | 9.9       |
| 50°-60°   | 76.0   | 7.9       |
| 60°-70°   | 52.7   | 5.5       |
| 70°-80°   | 28.4   | 3.0       |
| 80°-90°   | 8.4    | 0.9       |
| 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°    | 510.0  | 53.0      |
| 0°-40°    | 702.2  | 72.9      |
| 0°-60°    | 873.4  | 90.7      |
| 0°-90°    | 962.9  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 962.9  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 733 |      |
| 5°  | 721 | 68   |
| 15° | 647 | 183  |
| 25° | 572 | 260  |
| 35° | 304 | 192  |
| 45° | 121 | 95   |
| 55° | 85  | 76   |
| 65° | 53  | 53   |
| 75° | 26  | 28   |
| 85° | 8   | 8    |
| 90° | 0   |      |



TEST NUMBER: P583599

CATALOG NUMBER: HC807D010-HM80520835-81PSMDW

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 733.0 |
| 2.5°  | 729.8 |
| 5°    | 720.7 |
| 7.5°  | 706.5 |
| 10°   | 686.4 |
| 12.5° | 665.6 |
| 15°   | 646.9 |
| 17.5° | 628.8 |
| 20°   | 612.0 |
| 22.5° | 595.1 |
| 25°   | 572.4 |
| 27.5° | 539.4 |
| 30°   | 490.8 |
| 32.5° | 416.3 |
| 35°   | 304.4 |
| 37.5° | 207.8 |
| 40°   | 157.4 |
| 42.5° | 134.7 |
| 45°   | 121.1 |
| 47.5° | 110.1 |
| 50°   | 100.4 |
| 52.5° | 91.9  |
| 55°   | 85.4  |
| 57.5° | 77.7  |
| 60°   | 69.3  |
| 62.5° | 60.8  |
| 65°   | 53.1  |
| 67.5° | 45.3  |
| 70°   | 38.8  |
| 72.5° | 32.4  |
| 75°   | 26.5  |
| 77.5° | 21.4  |
| 80°   | 16.1  |
| 82.5° | 11.7  |
| 85°   | 7.8   |
| 87.5° | 3.2   |
| 90°   | 0.0   |



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°







(END OF REPORT)