

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: P584866

Luminaire Tested: **HC850D010-HM82555930-81MDW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584866
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: HC850D010-HM82555930-81MDW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4932.5 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 0.95
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

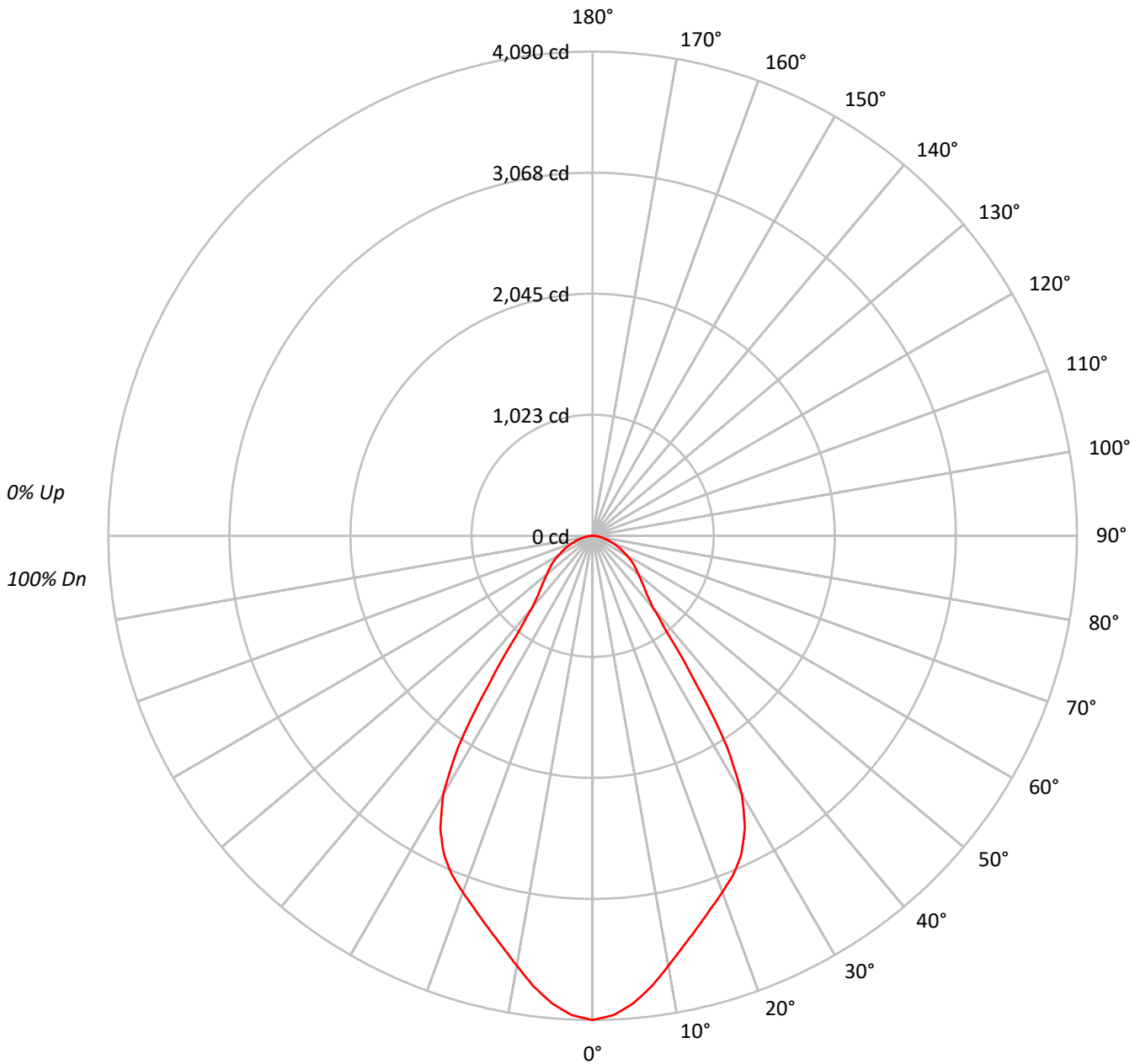
Input Watts (W): 48
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 0 |
| 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° | 126124 |
| 5° | 122687 |
| 10° | 115451 |
| 15° | 109308 |
| 20° | 105144 |
| 25° | 101086 |
| 30° | 89775 |
| 35° | 57174 |
| 40° | 31909 |
| 45° | 26728 |
| 50° | 24126 |
| 55° | 22736 |
| 60° | 20747 |
| 65° | 18716 |
| 70° | 16517 |
| 75° | 14678 |
| 80° | 13017 |
| 85° | 11782 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 369.5 | 7.5 |
| 10°-20° | 965.6 | 19.6 |
| 20°-30° | 1347.1 | 27.3 |
| 30°-40° | 969.3 | 19.7 |
| 40°-50° | 480.4 | 9.7 |
| 50°-60° | 375.8 | 7.6 |
| 60°-70° | 254.4 | 5.2 |
| 70°-80° | 132.2 | 2.7 |
| 80°-90° | 38.0 | 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° | 2682.3 | 54.4 |
| 0°-40° | 3651.6 | 74.0 |
| 0°-60° | 4507.8 | 91.4 |
| 0°-90° | 4932.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4932.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 4090 | |
| 5° | 3964 | 370 |
| 15° | 3424 | 966 |
| 25° | 2971 | 1347 |
| 35° | 1519 | 969 |
| 45° | 613 | 480 |
| 55° | 423 | 376 |
| 65° | 256 | 254 |
| 75° | 123 | 132 |
| 85° | 33 | 38 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 4090.1 |
| 2.5° | 4053.5 |
| 5° | 3963.5 |
| 7.5° | 3837.0 |
| 10° | 3687.1 |
| 12.5° | 3547.2 |
| 15° | 3424.0 |
| 17.5° | 3307.5 |
| 20° | 3204.1 |
| 22.5° | 3100.9 |
| 25° | 2971.0 |
| 27.5° | 2784.4 |
| 30° | 2521.3 |
| 32.5° | 2108.3 |
| 35° | 1518.8 |
| 37.5° | 1035.9 |
| 40° | 792.7 |
| 42.5° | 682.8 |
| 45° | 612.9 |
| 47.5° | 552.9 |
| 50° | 502.9 |
| 52.5° | 459.7 |
| 55° | 422.9 |
| 57.5° | 379.7 |
| 60° | 336.4 |
| 62.5° | 293.1 |
| 65° | 256.5 |
| 67.5° | 219.8 |
| 70° | 183.2 |
| 72.5° | 153.3 |
| 75° | 123.2 |
| 77.5° | 96.6 |
| 80° | 73.3 |
| 82.5° | 53.3 |
| 85° | 33.3 |
| 87.5° | 16.6 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)