

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: P584865

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

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584865
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: HC850D010-HM82555930-81MDH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4919.2 lumens
Efficiency: N/A
Efficacy: 102.5 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

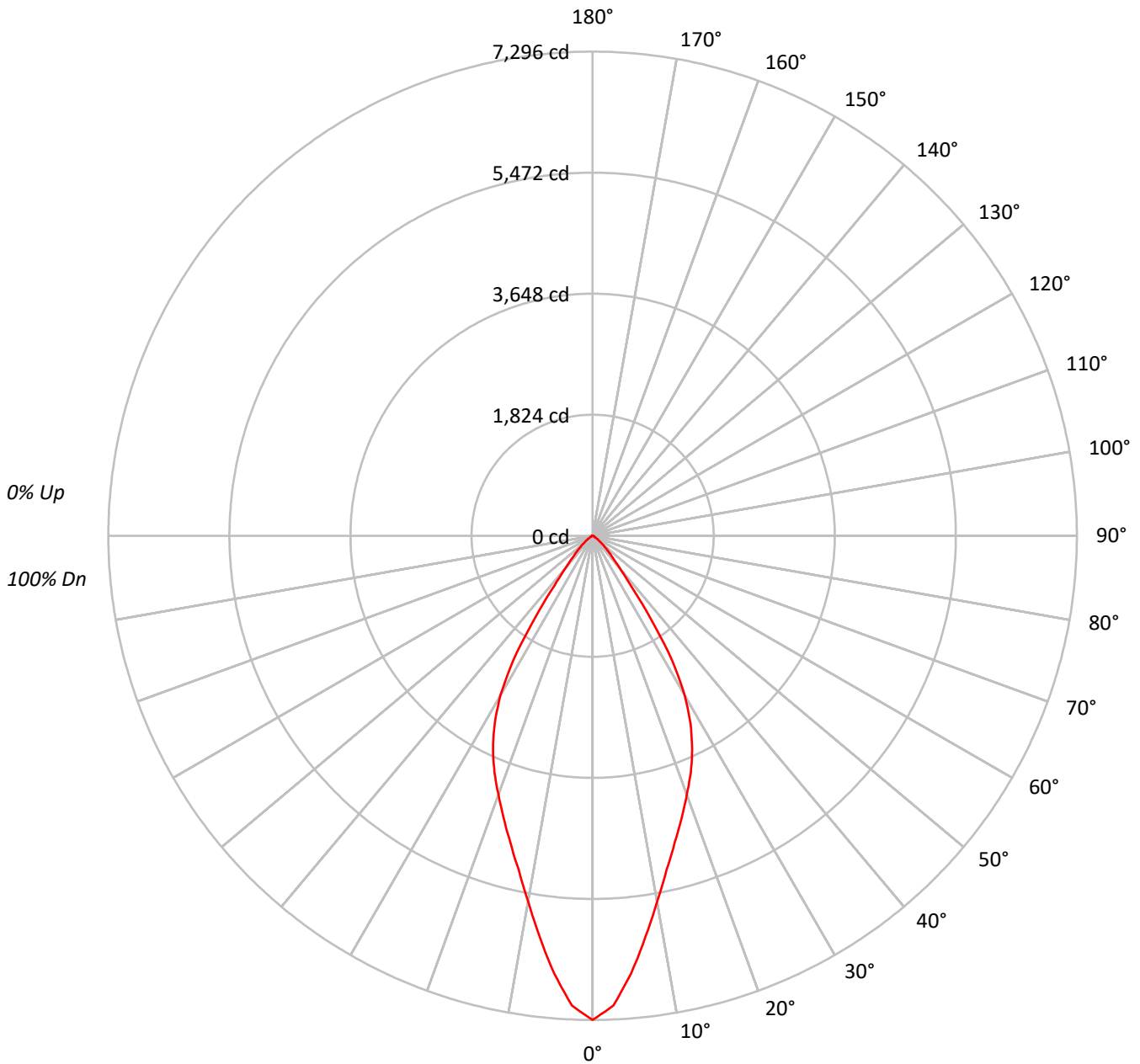
Input Watts (W): 48
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 114 | 111 | 108 | 106 | 111 | 109 | 106 | 104 | 105 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 94 | | | |
| 2 | 108 | 103 | 99 | 96 | 106 | 101 | 98 | 95 | 98 | 95 | 93 | 95 | 93 | 91 | 92 | 90 | 89 | 87 | | | |
| 3 | 103 | 96 | 91 | 87 | 101 | 95 | 90 | 87 | 92 | 88 | 85 | 90 | 87 | 84 | 88 | 85 | 83 | 81 | | | |
| 4 | 97 | 90 | 85 | 80 | 96 | 89 | 84 | 80 | 87 | 82 | 79 | 85 | 81 | 78 | 83 | 80 | 77 | 76 | | | |
| 5 | 93 | 84 | 79 | 74 | 91 | 83 | 78 | 74 | 82 | 77 | 73 | 80 | 76 | 73 | 78 | 75 | 72 | 71 | | | |
| 6 | 88 | 79 | 73 | 69 | 87 | 78 | 73 | 69 | 77 | 72 | 68 | 76 | 71 | 68 | 74 | 70 | 67 | 66 | | | |
| 7 | 84 | 75 | 69 | 64 | 82 | 74 | 68 | 64 | 73 | 68 | 64 | 71 | 67 | 64 | 70 | 66 | 63 | 62 | | | |
| 8 | 80 | 70 | 64 | 60 | 79 | 70 | 64 | 60 | 69 | 64 | 60 | 68 | 63 | 60 | 67 | 63 | 60 | 58 | | | |
| 9 | 76 | 67 | 61 | 57 | 75 | 66 | 61 | 57 | 65 | 60 | 56 | 64 | 60 | 56 | 63 | 59 | 56 | 55 | | | |
| 10 | 73 | 63 | 57 | 54 | 72 | 63 | 57 | 53 | 62 | 57 | 53 | 61 | 56 | 53 | 60 | 56 | 53 | 52 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 224966 |
| 5° | 205006 |
| 10° | 175159 |
| 15° | 152750 |
| 20° | 136147 |
| 25° | 120772 |
| 30° | 98883 |
| 35° | 56782 |
| 40° | 25199 |
| 45° | 14666 |
| 50° | 8467 |
| 55° | 4833 |
| 60° | 2670 |
| 65° | 1700 |
| 70° | 1199 |
| 75° | 798 |
| 80° | 586 |
| 85° | 1168 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 599.5 | 12.2 |
| 10°-20° | 1345.0 | 27.3 |
| 20°-30° | 1610.0 | 32.7 |
| 30°-40° | 974.0 | 19.8 |
| 40°-50° | 273.0 | 5.5 |
| 50°-60° | 84.8 | 1.7 |
| 60°-70° | 24.2 | 0.5 |
| 70°-80° | 6.6 | 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° | 3554.5 | 72.3 |
| 0°-40° | 4528.4 | 92.1 |
| 0°-60° | 4886.2 | 99.3 |
| 0°-90° | 4919.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4919.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 7296 | |
| 5° | 6623 | 600 |
| 15° | 4785 | 1345 |
| 25° | 3550 | 1610 |
| 35° | 1508 | 974 |
| 45° | 336 | 273 |
| 55° | 90 | 85 |
| 65° | 23 | 24 |
| 75° | 7 | 7 |
| 85° | 3 | 2 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 7295.5 |
| 2.5° | 7089.0 |
| 5° | 6622.9 |
| 7.5° | 6096.8 |
| 10° | 5594.0 |
| 12.5° | 5154.5 |
| 15° | 4784.8 |
| 17.5° | 4458.6 |
| 20° | 4148.9 |
| 22.5° | 3862.5 |
| 25° | 3549.6 |
| 27.5° | 3196.6 |
| 30° | 2777.1 |
| 32.5° | 2234.3 |
| 35° | 1508.4 |
| 37.5° | 938.9 |
| 40° | 626.0 |
| 42.5° | 449.5 |
| 45° | 336.3 |
| 47.5° | 246.4 |
| 50° | 176.5 |
| 52.5° | 123.2 |
| 55° | 89.9 |
| 57.5° | 60.0 |
| 60° | 43.3 |
| 62.5° | 29.9 |
| 65° | 23.3 |
| 67.5° | 16.6 |
| 70° | 13.3 |
| 72.5° | 6.7 |
| 75° | 6.7 |
| 77.5° | 3.3 |
| 80° | 3.3 |
| 82.5° | 3.3 |
| 85° | 3.3 |
| 87.5° | 0.0 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)