

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: P593847

Luminaire Tested: **HC855D010-HM82555950-81MDW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593847
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: HC855D010-HM82555950-81MDW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5737.9 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 0.95
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

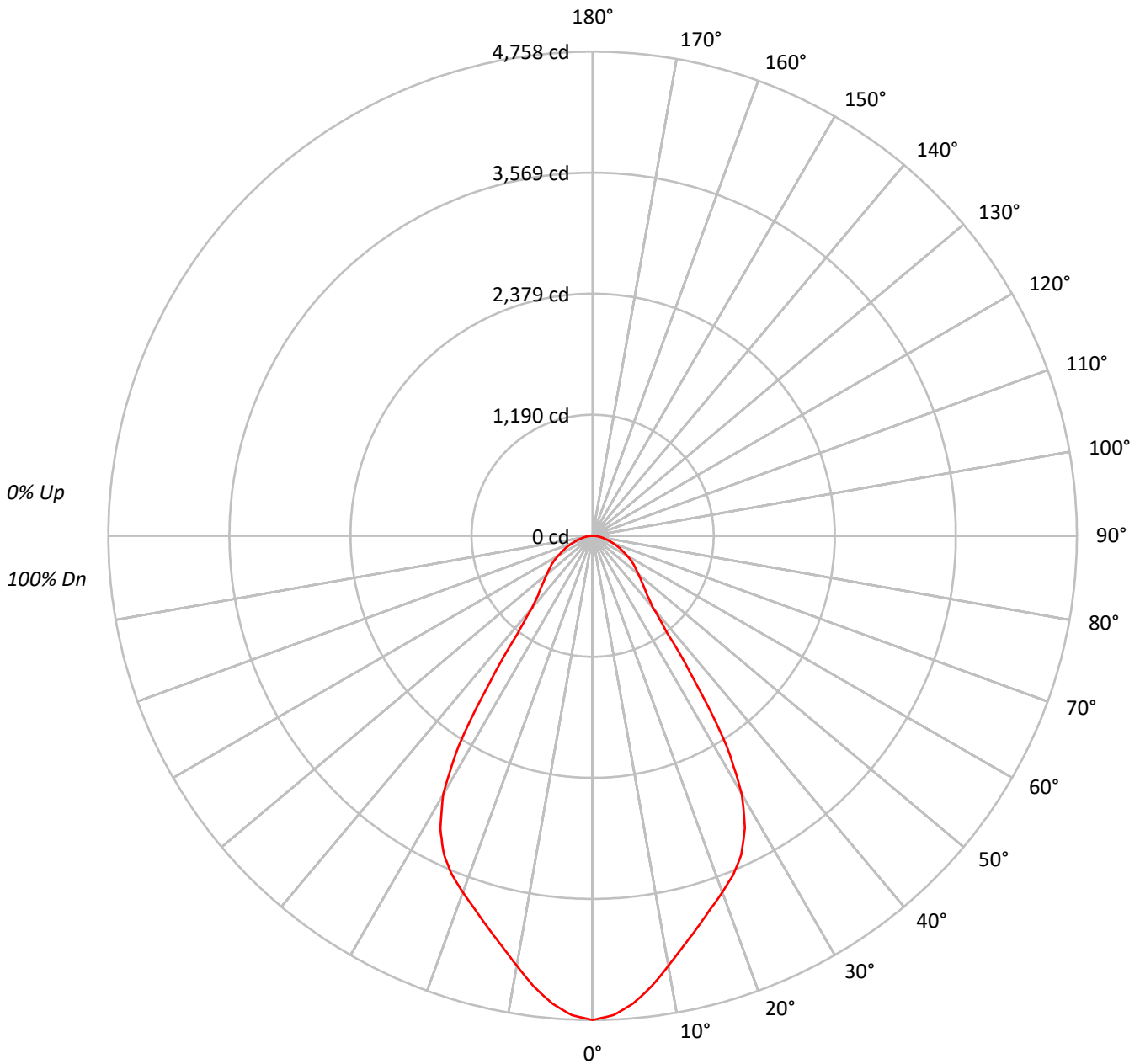
Input Watts (W): 52
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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° | 146719 |
| 5° | 142723 |
| 10° | 134303 |
| 15° | 127154 |
| 20° | 122313 |
| 25° | 117591 |
| 30° | 104434 |
| 35° | 66510 |
| 40° | 37118 |
| 45° | 31089 |
| 50° | 28069 |
| 55° | 26456 |
| 60° | 24132 |
| 65° | 21773 |
| 70° | 19213 |
| 75° | 17073 |
| 80° | 15130 |
| 85° | 13728 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 429.8 | 7.5 |
| 10°-20° | 1123.3 | 19.6 |
| 20°-30° | 1567.1 | 27.3 |
| 30°-40° | 1127.6 | 19.7 |
| 40°-50° | 558.8 | 9.7 |
| 50°-60° | 437.2 | 7.6 |
| 60°-70° | 296.0 | 5.2 |
| 70°-80° | 153.7 | 2.7 |
| 80°-90° | 44.3 | 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° | 3120.2 | 54.4 |
| 0°-40° | 4247.8 | 74.0 |
| 0°-60° | 5243.9 | 91.4 |
| 0°-90° | 5737.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5737.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 4758 | |
| 5° | 4611 | 430 |
| 15° | 3983 | 1123 |
| 25° | 3456 | 1567 |
| 35° | 1767 | 1128 |
| 45° | 713 | 559 |
| 55° | 492 | 437 |
| 65° | 298 | 296 |
| 75° | 143 | 154 |
| 85° | 39 | 44 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 4758.0 |
| 2.5° | 4715.3 |
| 5° | 4610.8 |
| 7.5° | 4463.4 |
| 10° | 4289.2 |
| 12.5° | 4126.4 |
| 15° | 3983.0 |
| 17.5° | 3847.4 |
| 20° | 3727.3 |
| 22.5° | 3607.2 |
| 25° | 3456.1 |
| 27.5° | 3239.2 |
| 30° | 2933.0 |
| 32.5° | 2452.6 |
| 35° | 1766.8 |
| 37.5° | 1204.9 |
| 40° | 922.1 |
| 42.5° | 794.3 |
| 45° | 712.9 |
| 47.5° | 643.2 |
| 50° | 585.1 |
| 52.5° | 534.7 |
| 55° | 492.1 |
| 57.5° | 441.7 |
| 60° | 391.3 |
| 62.5° | 340.9 |
| 65° | 298.4 |
| 67.5° | 255.7 |
| 70° | 213.1 |
| 72.5° | 178.3 |
| 75° | 143.3 |
| 77.5° | 112.4 |
| 80° | 85.2 |
| 82.5° | 62.0 |
| 85° | 38.8 |
| 87.5° | 19.3 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)