

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: P592557

Luminaire Tested: **HC405D010-HM40525950-41MDW**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P592557
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC405D010-HM40525950-41MDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" 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: 598.9 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 1.04 / 1.04 / 1.01
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

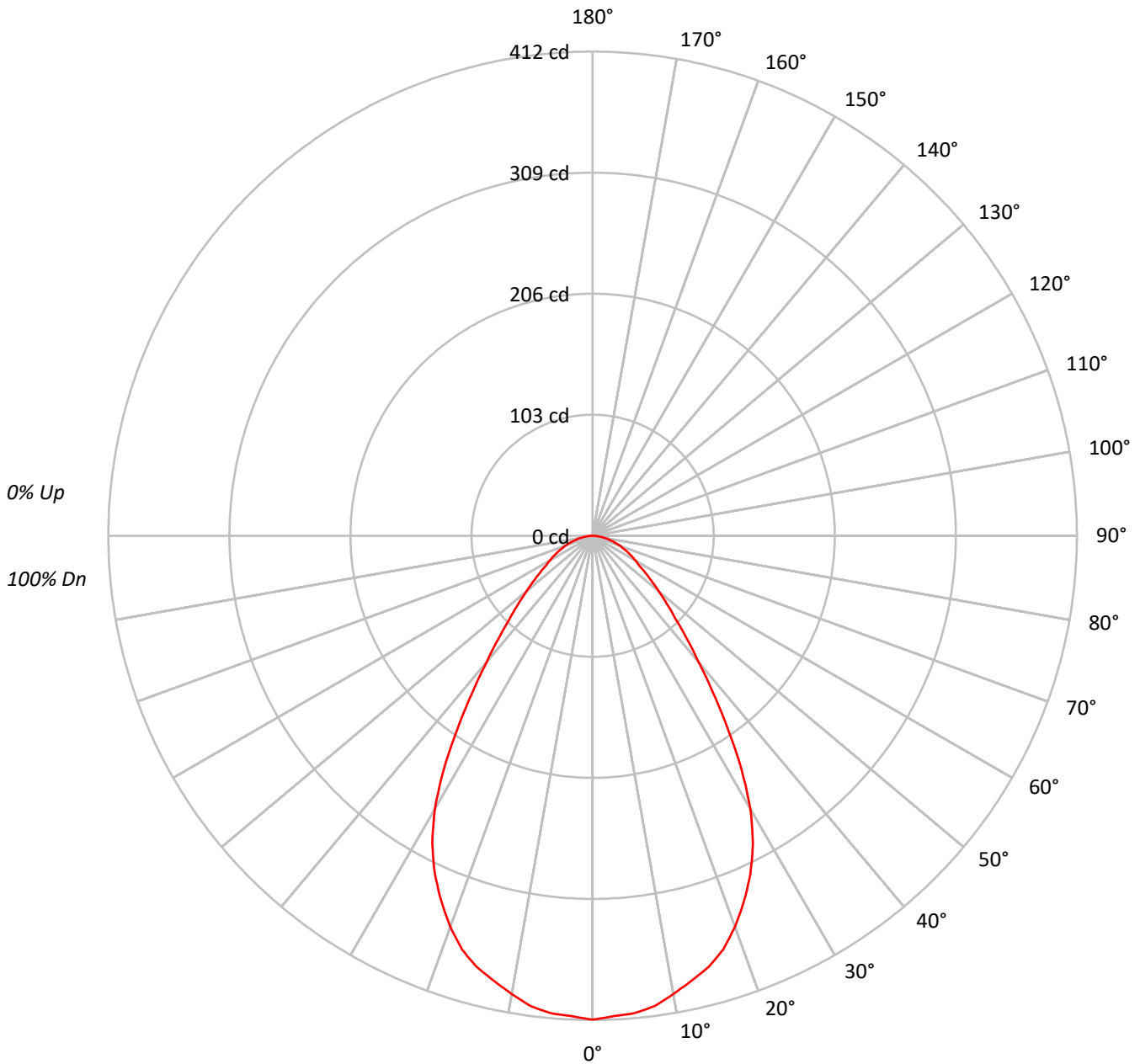
Input Watts (W): 6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | | | 100 |
| 1 | 111 | 108 | 104 | 101 | 109 | 105 | 102 | 100 | 101 | 99 | 97 | 97 | 95 | 94 | 94 | 92 | 91 | 89 | | | 89 |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 81 | 79 | | | 79 |
| 3 | 97 | 88 | 82 | 76 | 94 | 87 | 81 | 76 | 84 | 79 | 75 | 81 | 77 | 73 | 79 | 75 | 72 | 70 | | | 70 |
| 4 | 90 | 80 | 73 | 68 | 88 | 79 | 73 | 67 | 77 | 71 | 67 | 75 | 70 | 66 | 73 | 68 | 65 | 63 | | | 63 |
| 5 | 84 | 74 | 66 | 61 | 82 | 73 | 66 | 61 | 71 | 65 | 60 | 69 | 64 | 59 | 67 | 63 | 59 | 57 | | | 57 |
| 6 | 79 | 68 | 60 | 55 | 77 | 67 | 60 | 55 | 65 | 59 | 54 | 64 | 58 | 54 | 62 | 57 | 54 | 52 | | | 52 |
| 7 | 74 | 63 | 55 | 50 | 73 | 62 | 55 | 50 | 61 | 54 | 50 | 59 | 54 | 49 | 58 | 53 | 49 | 47 | | | 47 |
| 8 | 70 | 58 | 51 | 46 | 68 | 58 | 51 | 46 | 56 | 50 | 46 | 55 | 50 | 45 | 54 | 49 | 45 | 44 | | | 44 |
| 9 | 66 | 54 | 47 | 42 | 65 | 54 | 47 | 42 | 53 | 46 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 40 | | | 40 |
| 10 | 62 | 51 | 44 | 39 | 61 | 50 | 44 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 48 | 42 | 39 | 37 | | | 37 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 50781 |
| 5° | 50505 |
| 10° | 49586 |
| 15° | 48538 |
| 20° | 46467 |
| 25° | 43211 |
| 30° | 38242 |
| 35° | 30176 |
| 40° | 22591 |
| 45° | 17356 |
| 50° | 14085 |
| 55° | 11699 |
| 60° | 10336 |
| 65° | 9573 |
| 70° | 8836 |
| 75° | 8102 |
| 80° | 7316 |
| 85° | 5944 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 38.6 | 6.4 |
| 10°-20° | 106.6 | 17.8 |
| 20°-30° | 144.7 | 24.2 |
| 30°-40° | 125.4 | 20.9 |
| 40°-50° | 78.7 | 13.1 |
| 50°-60° | 49.5 | 8.3 |
| 60°-70° | 32.5 | 5.4 |
| 70°-80° | 17.9 | 3.0 |
| 80°-90° | 4.9 | 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° | 289.9 | 48.4 |
| 0°-40° | 415.3 | 69.3 |
| 0°-60° | 543.5 | 90.8 |
| 0°-90° | 598.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 598.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 412 | |
| 5° | 408 | 39 |
| 15° | 380 | 107 |
| 25° | 318 | 145 |
| 35° | 200 | 125 |
| 45° | 100 | 79 |
| 55° | 54 | 50 |
| 65° | 33 | 33 |
| 75° | 17 | 18 |
| 85° | 4 | 5 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 411.7 |
| 2.5° | 409.2 |
| 5° | 407.9 |
| 7.5° | 403.7 |
| 10° | 395.9 |
| 12.5° | 387.9 |
| 15° | 380.1 |
| 17.5° | 369.3 |
| 20° | 354.0 |
| 22.5° | 336.5 |
| 25° | 317.5 |
| 27.5° | 295.4 |
| 30° | 268.5 |
| 32.5° | 235.7 |
| 35° | 200.4 |
| 37.5° | 168.1 |
| 40° | 140.3 |
| 42.5° | 118.3 |
| 45° | 99.5 |
| 47.5° | 85.5 |
| 50° | 73.4 |
| 52.5° | 63.1 |
| 55° | 54.4 |
| 57.5° | 46.9 |
| 60° | 41.9 |
| 62.5° | 37.3 |
| 65° | 32.8 |
| 67.5° | 28.3 |
| 70° | 24.5 |
| 72.5° | 20.3 |
| 75° | 17.0 |
| 77.5° | 13.3 |
| 80° | 10.3 |
| 82.5° | 7.0 |
| 85° | 4.2 |
| 87.5° | 1.7 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)