

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: P584665

Luminaire Tested: **HC845D010-HM82555830-81NDW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584665
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC845D010-HM82555830-81NDW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4306.1 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.06 / 0.92
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

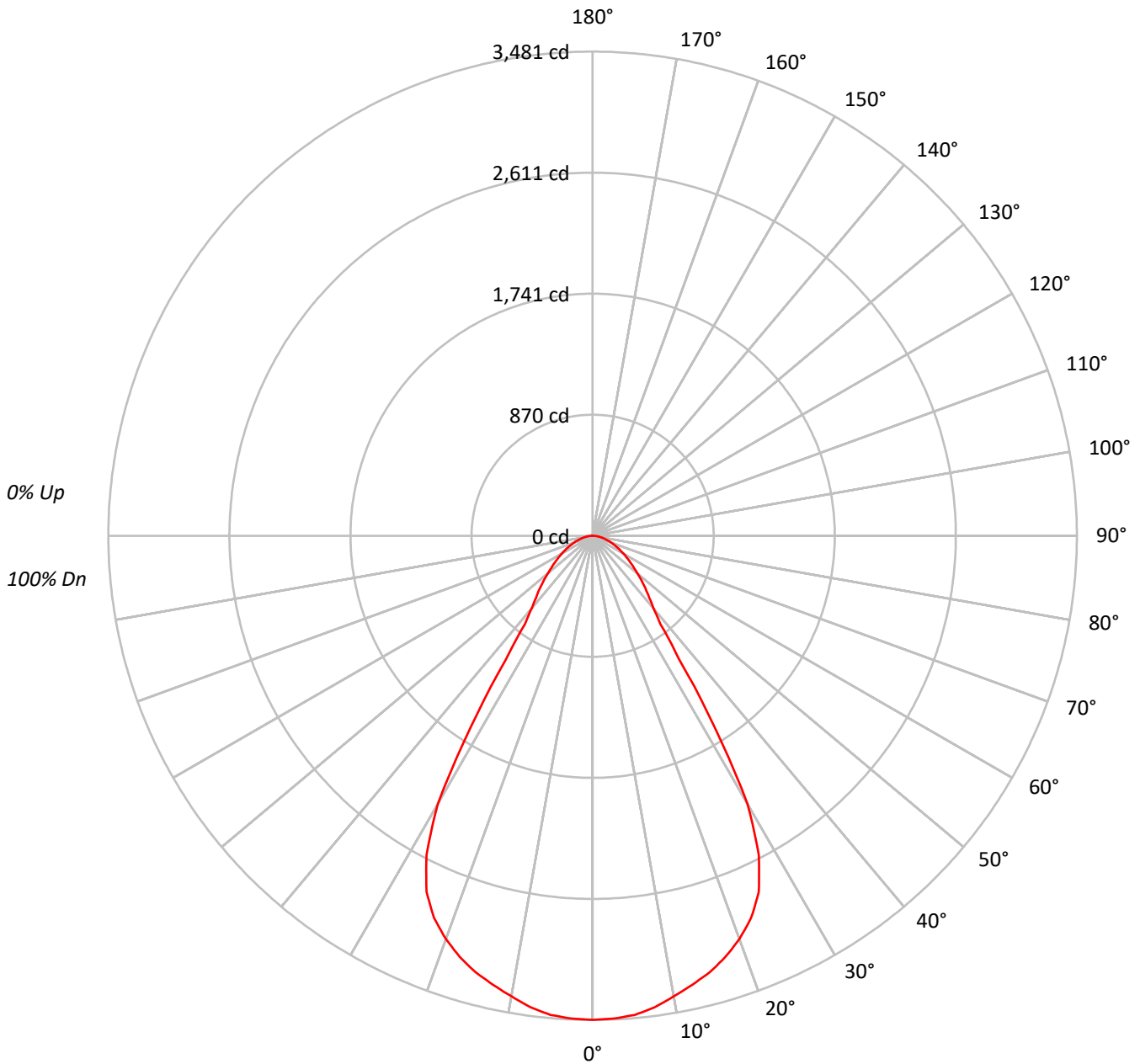
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 101 | 102 | 100 | 98 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | | | |
| 2 | 105 | 99 | 94 | 90 | 102 | 97 | 92 | 88 | 94 | 90 | 87 | 91 | 87 | 85 | 88 | 85 | 83 | 81 | | | |
| 3 | 98 | 90 | 84 | 79 | 96 | 89 | 83 | 79 | 86 | 81 | 77 | 84 | 80 | 76 | 81 | 78 | 75 | 73 | | | |
| 4 | 92 | 83 | 76 | 71 | 90 | 82 | 76 | 71 | 80 | 74 | 70 | 77 | 73 | 69 | 75 | 72 | 68 | 67 | | | |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 69 | 64 | 74 | 68 | 64 | 72 | 67 | 63 | 70 | 66 | 63 | 61 | | | |
| 6 | 82 | 71 | 64 | 59 | 80 | 70 | 64 | 59 | 69 | 63 | 58 | 67 | 62 | 58 | 66 | 61 | 58 | 56 | | | |
| 7 | 77 | 66 | 59 | 54 | 76 | 66 | 59 | 54 | 64 | 58 | 54 | 63 | 58 | 54 | 62 | 57 | 53 | 52 | | | |
| 8 | 73 | 62 | 55 | 50 | 71 | 61 | 55 | 50 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 49 | 48 | | | |
| 9 | 69 | 58 | 51 | 47 | 68 | 57 | 51 | 47 | 56 | 51 | 46 | 55 | 50 | 46 | 55 | 50 | 46 | 45 | | | |
| 10 | 65 | 55 | 48 | 44 | 64 | 54 | 48 | 44 | 53 | 47 | 43 | 52 | 47 | 43 | 52 | 47 | 43 | 42 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 107329 |
| 5° | 107042 |
| 10° | 105262 |
| 15° | 103725 |
| 20° | 101235 |
| 25° | 96101 |
| 30° | 79264 |
| 35° | 40810 |
| 40° | 27324 |
| 45° | 23427 |
| 50° | 20221 |
| 55° | 17639 |
| 60° | 15677 |
| 65° | 14082 |
| 70° | 12767 |
| 75° | 11497 |
| 80° | 10282 |
| 85° | 10260 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 327.0 | 7.6 |
| 10°-20° | 914.1 | 21.2 |
| 20°-30° | 1266.6 | 29.4 |
| 30°-40° | 760.7 | 17.7 |
| 40°-50° | 416.5 | 9.7 |
| 50°-60° | 295.9 | 6.9 |
| 60°-70° | 192.1 | 4.5 |
| 70°-80° | 102.6 | 2.4 |
| 80°-90° | 30.7 | 0.7 |
| 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° | 2507.7 | 58.2 |
| 0°-40° | 3268.4 | 75.9 |
| 0°-60° | 3980.7 | 92.4 |
| 0°-90° | 4306.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4306.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3481 | |
| 5° | 3458 | 327 |
| 15° | 3249 | 914 |
| 25° | 2824 | 1267 |
| 35° | 1084 | 761 |
| 45° | 537 | 416 |
| 55° | 328 | 296 |
| 65° | 193 | 192 |
| 75° | 96 | 103 |
| 85° | 29 | 31 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 3480.6 |
| 2.5° | 3474.3 |
| 5° | 3458.1 |
| 7.5° | 3419.5 |
| 10° | 3361.7 |
| 12.5° | 3306.9 |
| 15° | 3249.1 |
| 17.5° | 3175.1 |
| 20° | 3085.0 |
| 22.5° | 2975.7 |
| 25° | 2824.5 |
| 27.5° | 2586.3 |
| 30° | 2226.1 |
| 32.5° | 1630.9 |
| 35° | 1084.1 |
| 37.5° | 801.0 |
| 40° | 678.8 |
| 42.5° | 601.5 |
| 45° | 537.2 |
| 47.5° | 476.1 |
| 50° | 421.5 |
| 52.5° | 370.0 |
| 55° | 328.1 |
| 57.5° | 289.5 |
| 60° | 254.2 |
| 62.5° | 221.9 |
| 65° | 193.0 |
| 67.5° | 164.1 |
| 70° | 141.6 |
| 72.5° | 115.8 |
| 75° | 96.5 |
| 77.5° | 77.2 |
| 80° | 57.9 |
| 82.5° | 41.9 |
| 85° | 29.0 |
| 87.5° | 12.9 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)