

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: P593491

Luminaire Tested: **HC807D010-HM80520850-81NDW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593491
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: HC807D010-HM80520850-81NDW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 931.6 lumens
Efficiency: N/A
Efficacy: 116.4 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

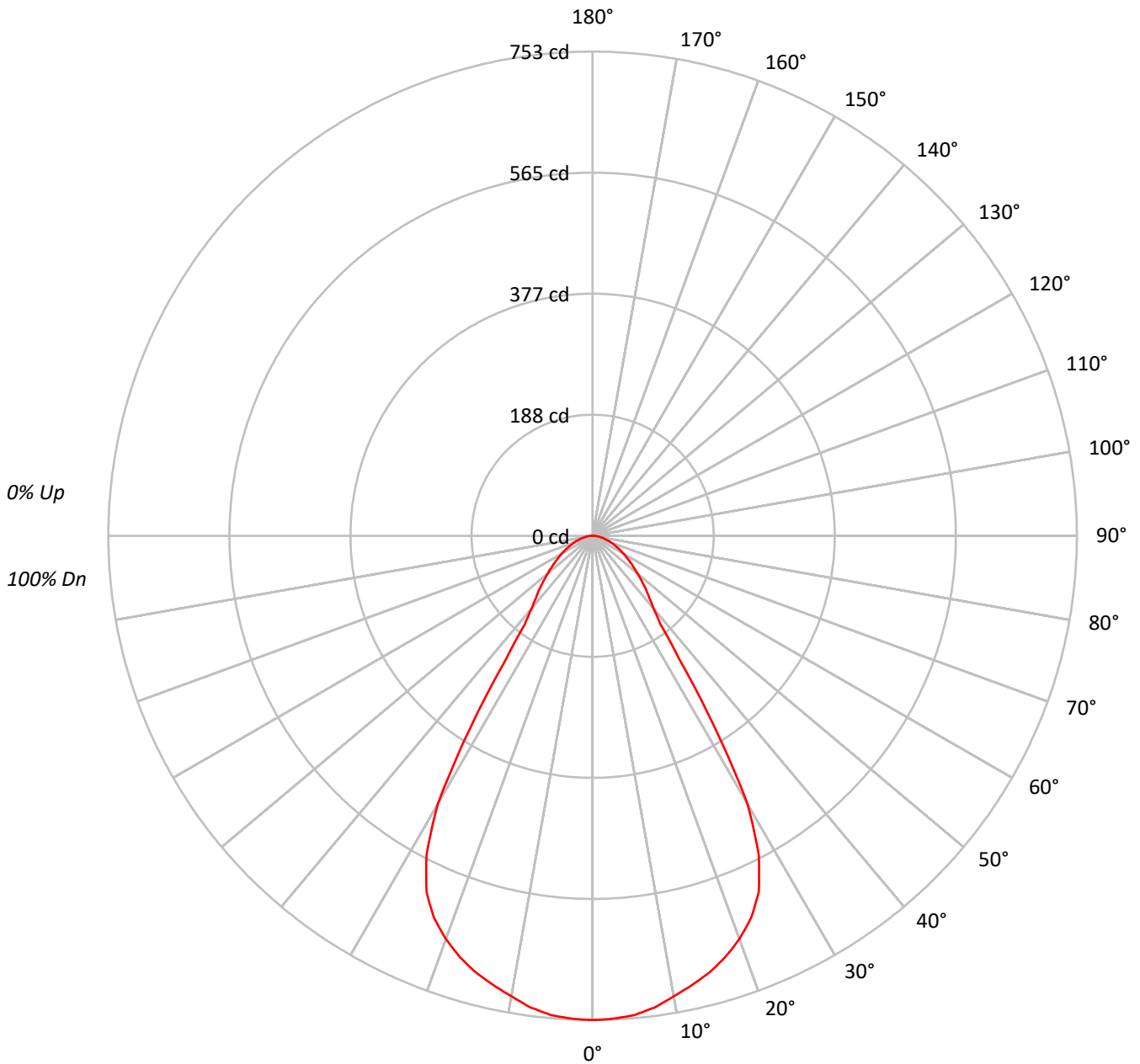
Input Watts (W): 8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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° | 23223 |
| 5° | 23160 |
| 10° | 22773 |
| 15° | 22439 |
| 20° | 21901 |
| 25° | 20789 |
| 30° | 17148 |
| 35° | 8831 |
| 40° | 5913 |
| 45° | 5072 |
| 50° | 4375 |
| 55° | 3817 |
| 60° | 3392 |
| 65° | 3043 |
| 70° | 2759 |
| 75° | 2490 |
| 80° | 2220 |
| 85° | 2194 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 70.7 | 7.6 |
| 10°-20° | 197.8 | 21.2 |
| 20°-30° | 274.0 | 29.4 |
| 30°-40° | 164.6 | 17.7 |
| 40°-50° | 90.1 | 9.7 |
| 50°-60° | 64.0 | 6.9 |
| 60°-70° | 41.5 | 4.5 |
| 70°-80° | 22.2 | 2.4 |
| 80°-90° | 6.6 | 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° | 542.5 | 58.2 |
| 0°-40° | 707.1 | 75.9 |
| 0°-60° | 861.2 | 92.4 |
| 0°-90° | 931.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 931.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 753 | |
| 5° | 748 | 71 |
| 15° | 703 | 198 |
| 25° | 611 | 274 |
| 35° | 235 | 165 |
| 45° | 116 | 90 |
| 55° | 71 | 64 |
| 65° | 42 | 42 |
| 75° | 21 | 22 |
| 85° | 6 | 7 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 753.1 |
| 2.5° | 751.7 |
| 5° | 748.2 |
| 7.5° | 739.8 |
| 10° | 727.3 |
| 12.5° | 715.4 |
| 15° | 702.9 |
| 17.5° | 686.9 |
| 20° | 667.4 |
| 22.5° | 643.7 |
| 25° | 611.0 |
| 27.5° | 559.5 |
| 30° | 481.6 |
| 32.5° | 352.9 |
| 35° | 234.6 |
| 37.5° | 173.3 |
| 40° | 146.9 |
| 42.5° | 130.1 |
| 45° | 116.3 |
| 47.5° | 103.0 |
| 50° | 91.2 |
| 52.5° | 80.1 |
| 55° | 71.0 |
| 57.5° | 62.6 |
| 60° | 55.0 |
| 62.5° | 48.0 |
| 65° | 41.7 |
| 67.5° | 35.5 |
| 70° | 30.6 |
| 72.5° | 25.1 |
| 75° | 20.9 |
| 77.5° | 16.7 |
| 80° | 12.5 |
| 82.5° | 9.1 |
| 85° | 6.2 |
| 87.5° | 2.7 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)