

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: P583751

Luminaire Tested: **HC810D010-HM80520840-81NDW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583751
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: HC810D010-HM80520840-81NDW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1159.1 lumens
Efficiency: N/A
Efficacy: 117.1 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

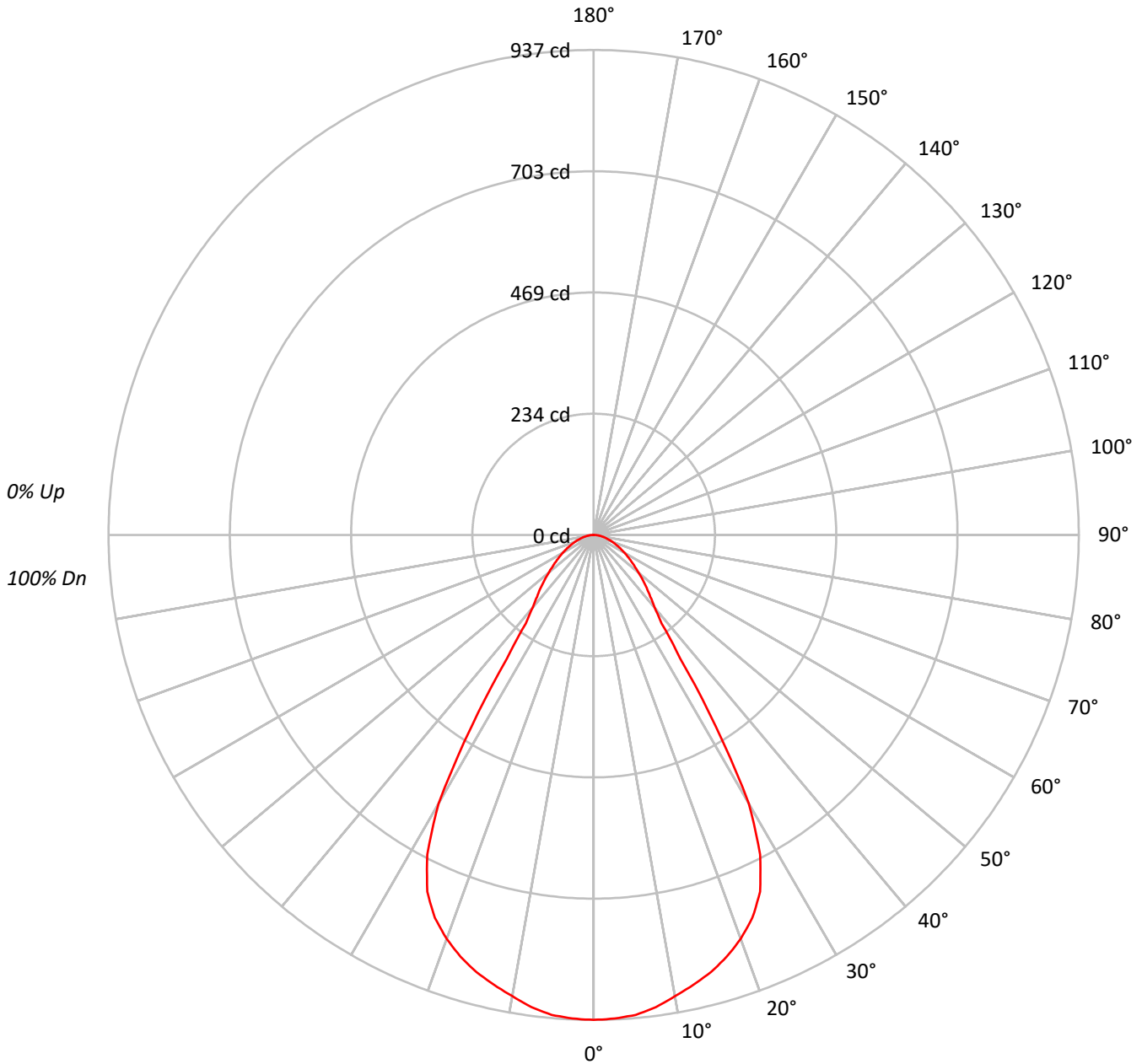
Input Watts (W): 9.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 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° | 28894 |
| 5° | 28815 |
| 10° | 28337 |
| 15° | 27924 |
| 20° | 27253 |
| 25° | 25872 |
| 30° | 21339 |
| 35° | 10985 |
| 40° | 7354 |
| 45° | 6306 |
| 50° | 5445 |
| 55° | 4747 |
| 60° | 4218 |
| 65° | 3787 |
| 70° | 3435 |
| 75° | 3098 |
| 80° | 2770 |
| 85° | 2760 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 88.0 | 7.6 |
| 10°-20° | 246.1 | 21.2 |
| 20°-30° | 341.0 | 29.4 |
| 30°-40° | 204.8 | 17.7 |
| 40°-50° | 112.1 | 9.7 |
| 50°-60° | 79.6 | 6.9 |
| 60°-70° | 51.7 | 4.5 |
| 70°-80° | 27.6 | 2.4 |
| 80°-90° | 8.3 | 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° | 675.1 | 58.2 |
| 0°-40° | 879.8 | 75.9 |
| 0°-60° | 1071.6 | 92.4 |
| 0°-90° | 1159.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1159.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-----|------|
| 0° | 937 | |
| 5° | 931 | 88 |
| 15° | 875 | 246 |
| 25° | 760 | 341 |
| 35° | 292 | 205 |
| 45° | 145 | 112 |
| 55° | 88 | 80 |
| 65° | 52 | 52 |
| 75° | 26 | 28 |
| 85° | 8 | 8 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|-------|
| 0° | 937.0 |
| 2.5° | 935.3 |
| 5° | 930.9 |
| 7.5° | 920.5 |
| 10° | 905.0 |
| 12.5° | 890.2 |
| 15° | 874.7 |
| 17.5° | 854.7 |
| 20° | 830.5 |
| 22.5° | 801.0 |
| 25° | 760.4 |
| 27.5° | 696.2 |
| 30° | 599.3 |
| 32.5° | 439.1 |
| 35° | 291.8 |
| 37.5° | 215.6 |
| 40° | 182.7 |
| 42.5° | 161.9 |
| 45° | 144.6 |
| 47.5° | 128.1 |
| 50° | 113.5 |
| 52.5° | 99.6 |
| 55° | 88.3 |
| 57.5° | 77.9 |
| 60° | 68.4 |
| 62.5° | 59.7 |
| 65° | 51.9 |
| 67.5° | 44.1 |
| 70° | 38.1 |
| 72.5° | 31.1 |
| 75° | 26.0 |
| 77.5° | 20.8 |
| 80° | 15.6 |
| 82.5° | 11.3 |
| 85° | 7.8 |
| 87.5° | 3.5 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)