

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: P584841

Luminaire Tested: **HC850D010-HM82555840-81WDH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-8)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC850D010-HM82555840-81WDH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6187.1 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.06
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

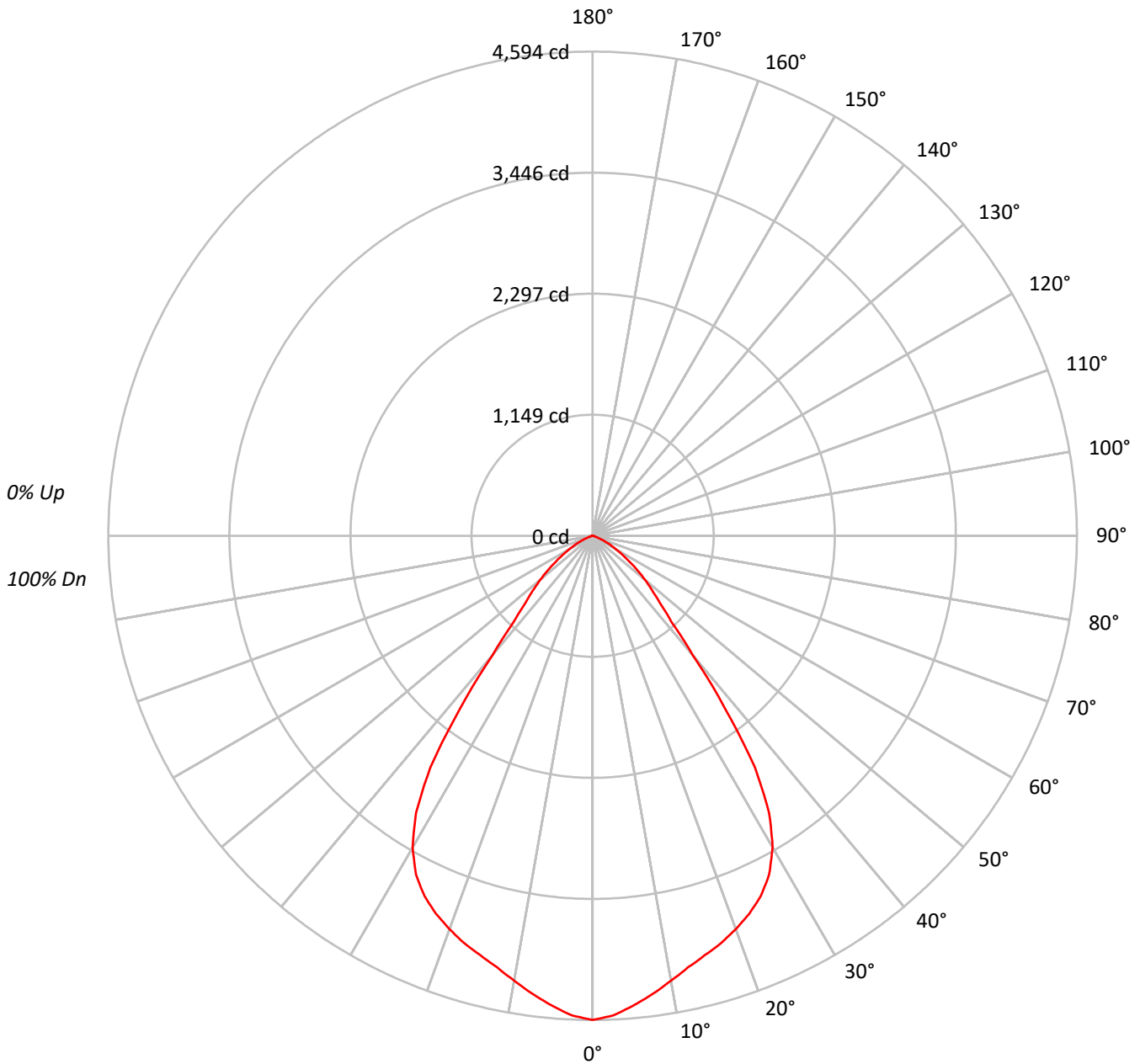
Input Watts (W): 48
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P584841

CATALOG NUMBER: HC850D010-HM82555840-81WDH

Luminous Intensity Polar Plot





TEST NUMBER: P584841

CATALOG NUMBER: HC850D010-HM82555840-81WDH

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 | 113 | 109 | 107 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99 | 99 | 98 | 96 | 96 | 95 | 93 | 92 | | | |
| 2 | 106 | 100 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 91 | 88 | 92 | 89 | 86 | 89 | 87 | 85 | 83 | | | |
| 3 | 99 | 92 | 86 | 81 | 97 | 90 | 85 | 81 | 88 | 83 | 79 | 85 | 81 | 78 | 83 | 80 | 77 | 75 | | | |
| 4 | 93 | 84 | 78 | 73 | 91 | 83 | 77 | 72 | 81 | 76 | 72 | 79 | 74 | 71 | 77 | 73 | 70 | 68 | | | |
| 5 | 87 | 78 | 71 | 66 | 86 | 77 | 70 | 66 | 75 | 69 | 65 | 73 | 68 | 64 | 71 | 67 | 64 | 62 | | | |
| 6 | 82 | 72 | 65 | 60 | 80 | 71 | 64 | 60 | 69 | 64 | 59 | 68 | 63 | 59 | 66 | 62 | 58 | 57 | | | |
| 7 | 77 | 67 | 60 | 55 | 76 | 66 | 59 | 55 | 64 | 59 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | 52 | | | |
| 8 | 73 | 62 | 55 | 50 | 71 | 61 | 55 | 50 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 49 | 48 | | | |
| 9 | 69 | 58 | 51 | 46 | 67 | 57 | 51 | 46 | 56 | 50 | 46 | 55 | 50 | 46 | 54 | 49 | 46 | 44 | | | |
| 10 | 65 | 54 | 47 | 43 | 64 | 53 | 47 | 43 | 53 | 47 | 43 | 52 | 46 | 43 | 51 | 46 | 42 | 41 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 141650 |
| 5° | 138455 |
| 10° | 134213 |
| 15° | 131495 |
| 20° | 130316 |
| 25° | 128366 |
| 30° | 121597 |
| 35° | 101029 |
| 40° | 59495 |
| 45° | 39353 |
| 50° | 30971 |
| 55° | 22795 |
| 60° | 15831 |
| 65° | 9646 |
| 70° | 4201 |
| 75° | 1847 |
| 80° | 1385 |
| 85° | 0 |



TEST NUMBER: P584841

CATALOG NUMBER: HC850D010-HM82555840-81WDH

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 421.2 | 6.8 |
| 10°-20° | 1164.5 | 18.8 |
| 20°-30° | 1725.3 | 27.9 |
| 30°-40° | 1594.2 | 25.8 |
| 40°-50° | 735.1 | 11.9 |
| 50°-60° | 386.6 | 6.2 |
| 60°-70° | 136.6 | 2.2 |
| 70°-80° | 21.4 | 0.3 |
| 80°-90° | 2.1 | 0.0 |
| 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° | 3311.0 | 53.5 |
| 0°-40° | 4905.3 | 79.3 |
| 0°-60° | 6027.0 | 97.4 |
| 0°-90° | 6187.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6187.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 4594 | |
| 5° | 4473 | 421 |
| 15° | 4119 | 1165 |
| 25° | 3773 | 1725 |
| 35° | 2684 | 1594 |
| 45° | 902 | 735 |
| 55° | 424 | 387 |
| 65° | 132 | 137 |
| 75° | 16 | 21 |
| 85° | 0 | 2 |
| 90° | 0 | |



TEST NUMBER: P584841

CATALOG NUMBER: HC850D010-HM82555840-81WDH

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 4593.6 |
| 2.5° | 4554.7 |
| 5° | 4472.9 |
| 7.5° | 4383.5 |
| 10° | 4286.3 |
| 12.5° | 4193.0 |
| 15° | 4119.0 |
| 17.5° | 4052.9 |
| 20° | 3971.2 |
| 22.5° | 3881.8 |
| 25° | 3772.8 |
| 27.5° | 3625.1 |
| 30° | 3415.0 |
| 32.5° | 3115.5 |
| 35° | 2683.8 |
| 37.5° | 2061.4 |
| 40° | 1478.0 |
| 42.5° | 1108.6 |
| 45° | 902.4 |
| 47.5° | 766.3 |
| 50° | 645.6 |
| 52.5° | 529.0 |
| 55° | 424.0 |
| 57.5° | 334.5 |
| 60° | 256.7 |
| 62.5° | 194.5 |
| 65° | 132.2 |
| 67.5° | 77.7 |
| 70° | 46.6 |
| 72.5° | 27.2 |
| 75° | 15.5 |
| 77.5° | 11.7 |
| 80° | 7.8 |
| 82.5° | 3.9 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)