

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: P584315

Luminaire Tested: **HC830D010-HM82555927-81WDW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584315
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-9)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC830D010-HM82555927-81WDW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2751.6 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.06
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

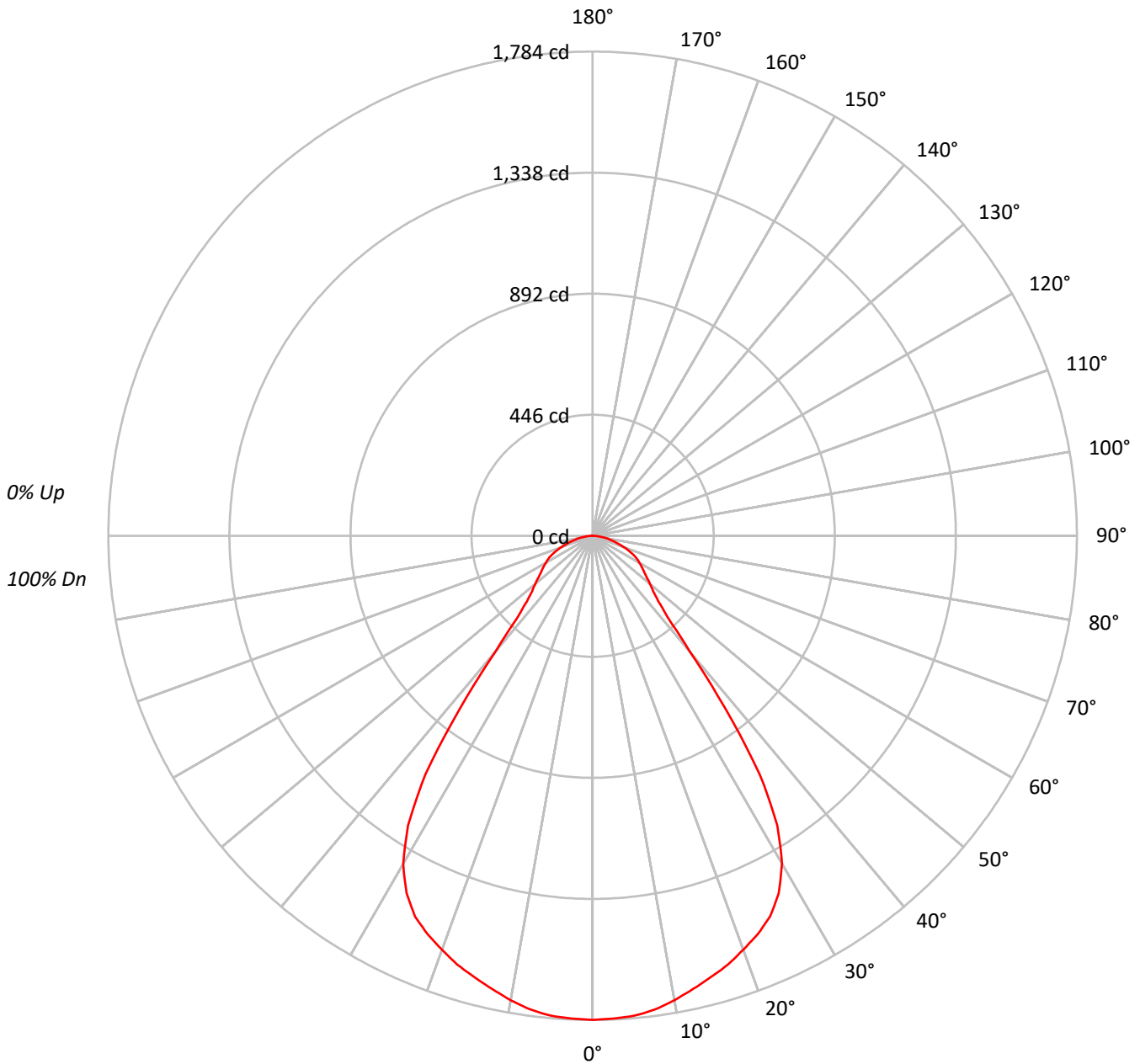
Input Watts (W): 28
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 96 | 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 | 61 | 55 | 77 | 67 | 60 | 55 | 65 | 59 | 55 | 64 | 58 | 54 | 62 | 58 | 54 | 52 | | | 52 |
| 7 | 74 | 63 | 56 | 50 | 73 | 62 | 55 | 50 | 61 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 49 | 48 | | | 48 |
| 8 | 70 | 58 | 51 | 46 | 69 | 58 | 51 | 46 | 57 | 50 | 46 | 55 | 50 | 46 | 54 | 49 | 45 | 44 | | | 44 |
| 9 | 66 | 54 | 47 | 43 | 65 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 40 | | | 40 |
| 10 | 62 | 51 | 44 | 39 | 61 | 50 | 44 | 39 | 49 | 43 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 37 | | | 37 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 55012 |
| 5° | 54947 |
| 10° | 54401 |
| 15° | 53747 |
| 20° | 53249 |
| 25° | 52656 |
| 30° | 49682 |
| 35° | 40456 |
| 40° | 22353 |
| 45° | 14919 |
| 50° | 13231 |
| 55° | 12419 |
| 60° | 12261 |
| 65° | 12156 |
| 70° | 10981 |
| 75° | 9817 |
| 80° | 8595 |
| 85° | 7607 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 168.2 | 6.1 |
| 10°-20° | 475.4 | 17.3 |
| 20°-30° | 706.4 | 25.7 |
| 30°-40° | 636.2 | 23.1 |
| 40°-50° | 282.0 | 10.2 |
| 50°-60° | 208.9 | 7.6 |
| 60°-70° | 162.4 | 5.9 |
| 70°-80° | 88.0 | 3.2 |
| 80°-90° | 24.1 | 0.9 |
| 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° | 1350.0 | 49.1 |
| 0°-40° | 1986.2 | 72.2 |
| 0°-60° | 2477.1 | 90.0 |
| 0°-90° | 2751.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2751.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1784 | |
| 5° | 1775 | 168 |
| 15° | 1684 | 475 |
| 25° | 1548 | 706 |
| 35° | 1075 | 636 |
| 45° | 342 | 282 |
| 55° | 231 | 209 |
| 65° | 167 | 162 |
| 75° | 82 | 88 |
| 85° | 22 | 24 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1784.0 |
| 2.5° | 1780.4 |
| 5° | 1775.1 |
| 7.5° | 1760.7 |
| 10° | 1737.4 |
| 12.5° | 1710.5 |
| 15° | 1683.6 |
| 17.5° | 1656.8 |
| 20° | 1622.7 |
| 22.5° | 1588.7 |
| 25° | 1547.6 |
| 27.5° | 1484.8 |
| 30° | 1395.3 |
| 32.5° | 1266.3 |
| 35° | 1074.7 |
| 37.5° | 802.5 |
| 40° | 555.3 |
| 42.5° | 410.2 |
| 45° | 342.1 |
| 47.5° | 302.7 |
| 50° | 275.8 |
| 52.5° | 250.8 |
| 55° | 231.0 |
| 57.5° | 215.0 |
| 60° | 198.8 |
| 62.5° | 184.5 |
| 65° | 166.6 |
| 67.5° | 145.1 |
| 70° | 121.8 |
| 72.5° | 102.1 |
| 75° | 82.4 |
| 77.5° | 64.4 |
| 80° | 48.4 |
| 82.5° | 34.0 |
| 85° | 21.5 |
| 87.5° | 8.9 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)