

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: P584269

Luminaire Tested: **HC830D010-HM82555835-81MDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584269
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC830D010-HM82555835-81MDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3716.6 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.67
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

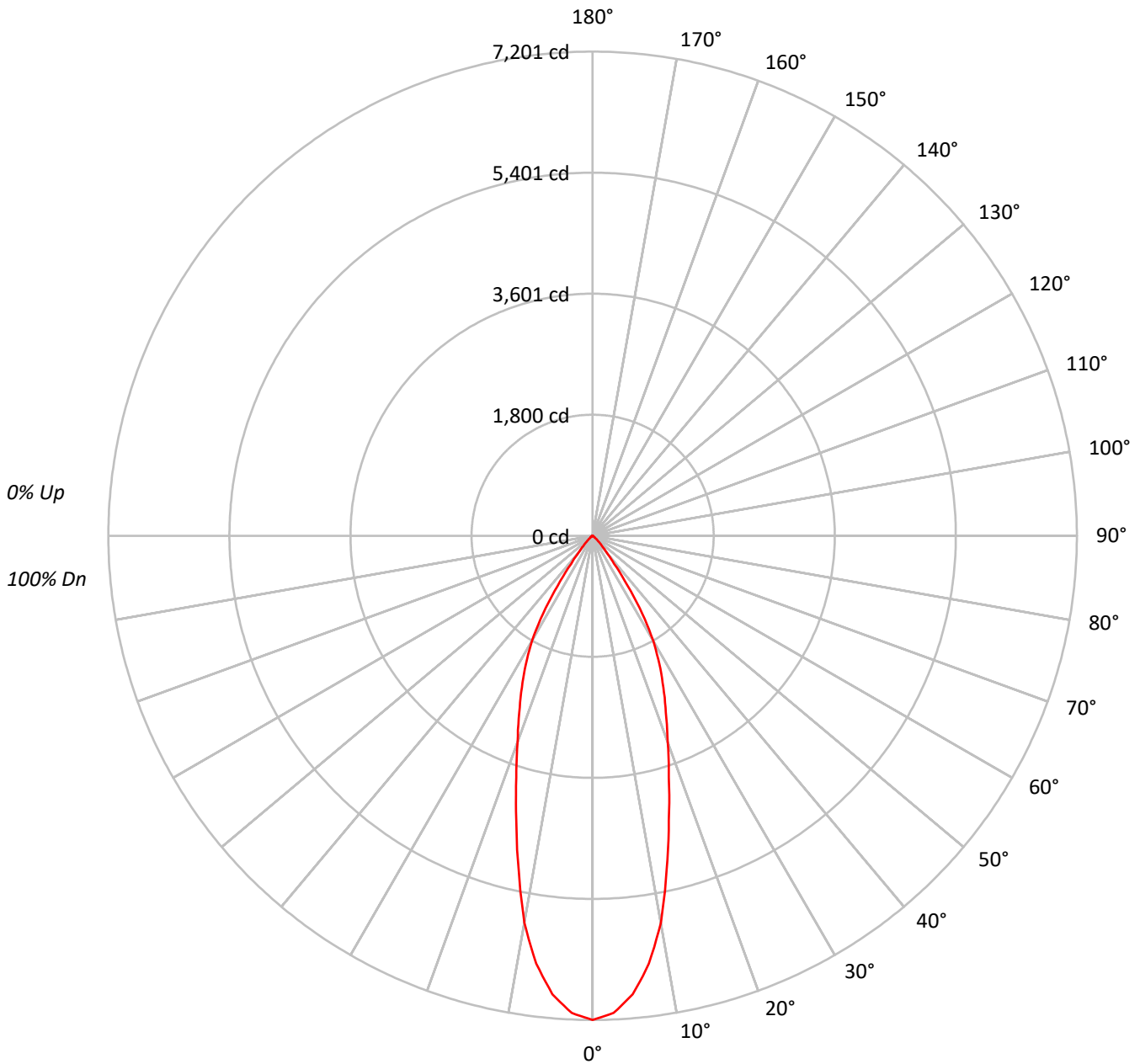
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | | | 100 |
| 1 | 114 | 111 | 109 | 107 | 112 | 109 | 107 | 105 | 105 | 104 | 102 | 102 | 100 | 99 | 98 | 97 | 96 | 95 | | | 95 |
| 2 | 109 | 105 | 101 | 98 | 107 | 103 | 100 | 97 | 100 | 97 | 95 | 97 | 95 | 93 | 94 | 92 | 91 | 89 | | | 89 |
| 3 | 104 | 98 | 94 | 90 | 102 | 97 | 93 | 90 | 94 | 91 | 88 | 92 | 89 | 87 | 90 | 87 | 85 | 84 | | | 84 |
| 4 | 100 | 93 | 88 | 84 | 98 | 92 | 87 | 83 | 90 | 86 | 82 | 88 | 84 | 82 | 86 | 83 | 81 | 79 | | | 79 |
| 5 | 95 | 88 | 82 | 78 | 94 | 87 | 82 | 78 | 85 | 81 | 77 | 83 | 80 | 77 | 82 | 79 | 76 | 75 | | | 75 |
| 6 | 91 | 83 | 78 | 74 | 90 | 82 | 77 | 74 | 81 | 76 | 73 | 79 | 76 | 73 | 78 | 75 | 72 | 71 | | | 71 |
| 7 | 87 | 79 | 73 | 70 | 86 | 78 | 73 | 69 | 77 | 72 | 69 | 76 | 72 | 69 | 75 | 71 | 68 | 67 | | | 67 |
| 8 | 84 | 75 | 70 | 66 | 82 | 74 | 69 | 66 | 73 | 69 | 65 | 72 | 68 | 65 | 71 | 68 | 65 | 64 | | | 64 |
| 9 | 80 | 71 | 66 | 62 | 79 | 71 | 66 | 62 | 70 | 65 | 62 | 69 | 65 | 62 | 68 | 65 | 62 | 61 | | | 61 |
| 10 | 77 | 68 | 63 | 59 | 76 | 68 | 63 | 59 | 67 | 62 | 59 | 66 | 62 | 59 | 65 | 62 | 59 | 58 | | | 58 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 222062 |
| 5° | 211872 |
| 10° | 182922 |
| 15° | 139875 |
| 20° | 107024 |
| 25° | 84672 |
| 30° | 63960 |
| 35° | 34027 |
| 40° | 12962 |
| 45° | 6219 |
| 50° | 2648 |
| 55° | 1113 |
| 60° | 426 |
| 65° | 336 |
| 70° | 207 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 621.3 | 16.7 |
| 10°-20° | 1223.2 | 32.9 |
| 20°-30° | 1139.2 | 30.7 |
| 30°-40° | 587.8 | 15.8 |
| 40°-50° | 119.7 | 3.2 |
| 50°-60° | 20.5 | 0.6 |
| 60°-70° | 4.0 | 0.1 |
| 70°-80° | 0.9 | 0.0 |
| 80°-90° | 0.0 | 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° | 2983.7 | 80.3 |
| 0°-40° | 3571.5 | 96.1 |
| 0°-60° | 3711.7 | 99.9 |
| 0°-90° | 3716.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3716.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 7201 | |
| 5° | 6845 | 621 |
| 15° | 4382 | 1223 |
| 25° | 2489 | 1139 |
| 35° | 904 | 588 |
| 45° | 143 | 120 |
| 55° | 21 | 20 |
| 65° | 5 | 4 |
| 75° | 0 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 7201.3 |
| 2.5° | 7104.6 |
| 5° | 6844.7 |
| 7.5° | 6416.9 |
| 10° | 5841.9 |
| 12.5° | 5087.6 |
| 15° | 4381.5 |
| 17.5° | 3769.7 |
| 20° | 3261.4 |
| 22.5° | 2847.4 |
| 25° | 2488.6 |
| 27.5° | 2148.2 |
| 30° | 1796.3 |
| 32.5° | 1377.7 |
| 35° | 903.9 |
| 37.5° | 524.3 |
| 40° | 322.0 |
| 42.5° | 211.6 |
| 45° | 142.6 |
| 47.5° | 89.7 |
| 50° | 55.2 |
| 52.5° | 32.2 |
| 55° | 20.7 |
| 57.5° | 9.2 |
| 60° | 6.9 |
| 62.5° | 4.6 |
| 65° | 4.6 |
| 67.5° | 2.3 |
| 70° | 2.3 |
| 72.5° | 2.3 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)