

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: P584917

Luminaire Tested: **HC855D010-HM82555827-81MDW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584917
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC855D010-HM82555827-81MDW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" MEDIUM DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5377.6 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 0.95
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

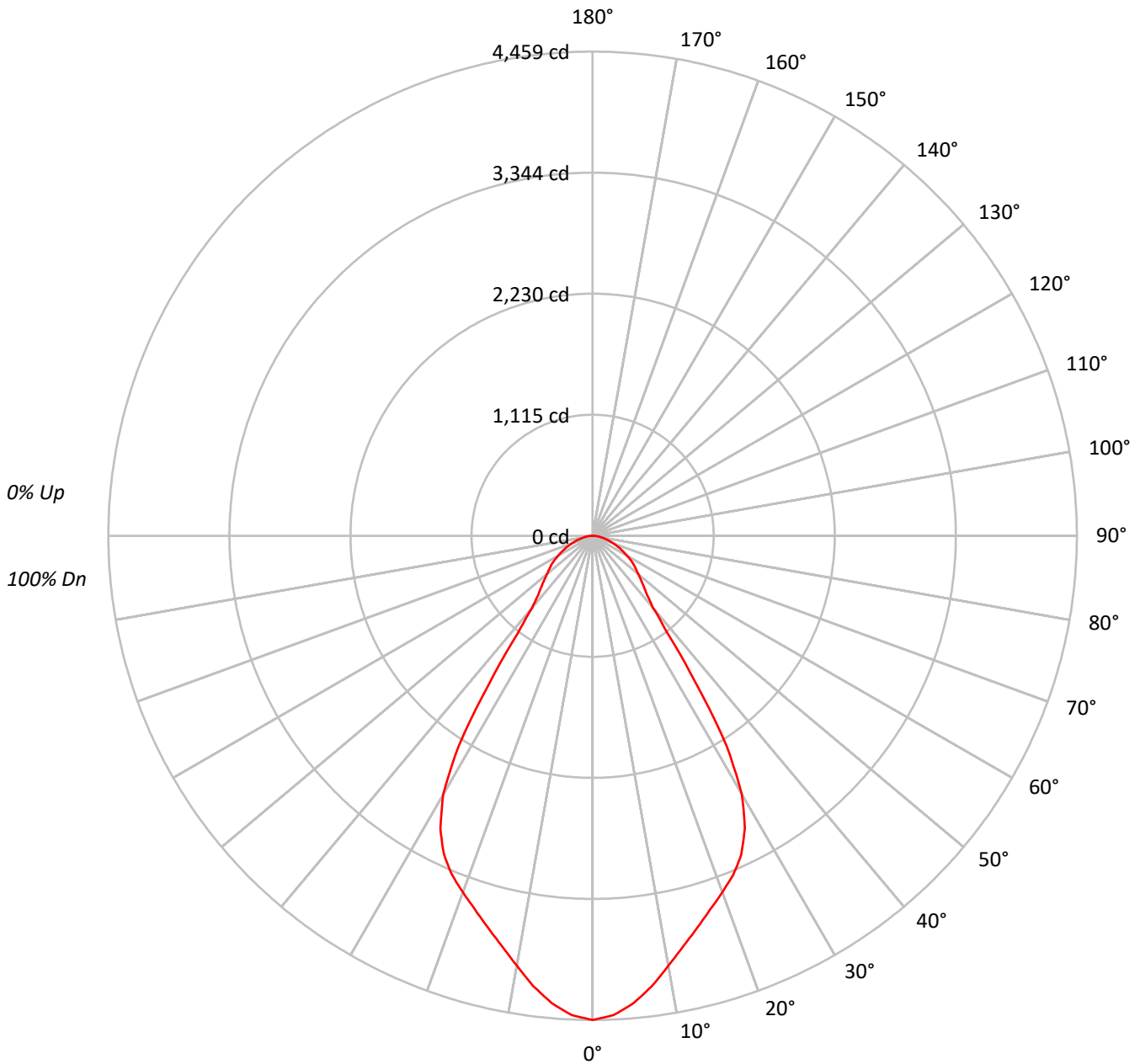
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | | | |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 92 | 90 | | | |
| 2 | 104 | 98 | 93 | 89 | 102 | 96 | 92 | 88 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 84 | 82 | 80 | | | |
| 3 | 98 | 89 | 83 | 78 | 95 | 88 | 82 | 78 | 85 | 80 | 76 | 83 | 78 | 75 | 80 | 77 | 74 | 72 | | | |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 69 | 76 | 72 | 68 | 74 | 70 | 67 | 65 | | | |
| 5 | 86 | 76 | 68 | 63 | 84 | 75 | 68 | 63 | 73 | 67 | 62 | 71 | 66 | 62 | 69 | 65 | 61 | 59 | | | |
| 6 | 81 | 70 | 63 | 58 | 79 | 69 | 62 | 57 | 67 | 61 | 57 | 66 | 61 | 56 | 64 | 60 | 56 | 54 | | | |
| 7 | 76 | 65 | 58 | 53 | 74 | 64 | 57 | 53 | 63 | 57 | 52 | 62 | 56 | 52 | 60 | 55 | 52 | 50 | | | |
| 8 | 72 | 61 | 54 | 49 | 70 | 60 | 53 | 49 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 46 | | | |
| 9 | 68 | 57 | 50 | 45 | 67 | 56 | 50 | 45 | 55 | 49 | 45 | 54 | 49 | 45 | 53 | 48 | 45 | 43 | | | |
| 10 | 64 | 53 | 46 | 42 | 63 | 53 | 46 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 50 | 45 | 42 | 40 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 137502 |
| 5° | 133759 |
| 10° | 125865 |
| 15° | 119169 |
| 20° | 114634 |
| 25° | 110207 |
| 30° | 97876 |
| 35° | 62331 |
| 40° | 34787 |
| 45° | 29140 |
| 50° | 26303 |
| 55° | 24795 |
| 60° | 22615 |
| 65° | 20401 |
| 70° | 18005 |
| 75° | 16001 |
| 80° | 14189 |
| 85° | 12843 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 402.8 | 7.5 |
| 10°-20° | 1052.8 | 19.6 |
| 20°-30° | 1468.7 | 27.3 |
| 30°-40° | 1056.8 | 19.7 |
| 40°-50° | 523.8 | 9.7 |
| 50°-60° | 409.8 | 7.6 |
| 60°-70° | 277.4 | 5.2 |
| 70°-80° | 144.1 | 2.7 |
| 80°-90° | 41.5 | 0.8 |
| 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° | 2924.3 | 54.4 |
| 0°-40° | 3981.0 | 74.0 |
| 0°-60° | 4914.6 | 91.4 |
| 0°-90° | 5377.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5377.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 4459 | |
| 5° | 4321 | 403 |
| 15° | 3733 | 1053 |
| 25° | 3239 | 1469 |
| 35° | 1656 | 1057 |
| 45° | 668 | 524 |
| 55° | 461 | 410 |
| 65° | 280 | 277 |
| 75° | 134 | 144 |
| 85° | 36 | 42 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 4459.1 |
| 2.5° | 4419.1 |
| 5° | 4321.2 |
| 7.5° | 4183.2 |
| 10° | 4019.7 |
| 12.5° | 3867.2 |
| 15° | 3732.9 |
| 17.5° | 3605.8 |
| 20° | 3493.3 |
| 22.5° | 3380.6 |
| 25° | 3239.1 |
| 27.5° | 3035.7 |
| 30° | 2748.8 |
| 32.5° | 2298.5 |
| 35° | 1655.8 |
| 37.5° | 1129.3 |
| 40° | 864.2 |
| 42.5° | 744.5 |
| 45° | 668.2 |
| 47.5° | 602.8 |
| 50° | 548.3 |
| 52.5° | 501.1 |
| 55° | 461.2 |
| 57.5° | 414.0 |
| 60° | 366.7 |
| 62.5° | 319.6 |
| 65° | 279.6 |
| 67.5° | 239.7 |
| 70° | 199.7 |
| 72.5° | 167.0 |
| 75° | 134.3 |
| 77.5° | 105.4 |
| 80° | 79.9 |
| 82.5° | 58.1 |
| 85° | 36.3 |
| 87.5° | 18.2 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)