

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: P582722

Luminaire Tested: **HC650D010-HM64560830-61MDH**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582722
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC650D010-HM64560830-61MDH
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" MEDIUM DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4941.2 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 0.97
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

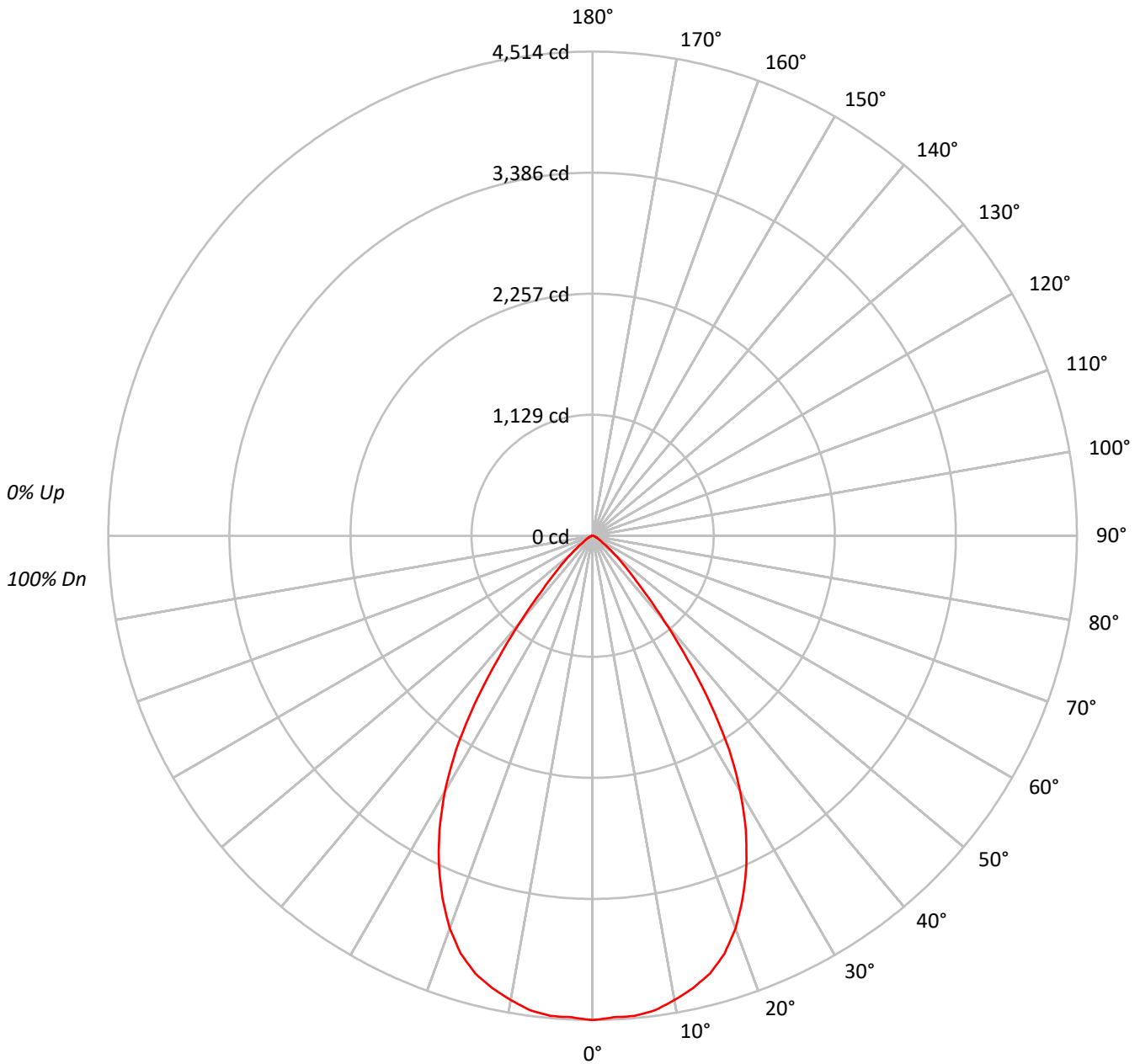
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 100 | 100 |
| 1 | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 96 | 94 | 93 | 93 | 93 | 93 |
| 2 | 107 | 102 | 98 | 94 | 105 | 100 | 96 | 93 | 97 | 94 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | 85 | 85 | 85 | 85 |
| 3 | 101 | 94 | 89 | 85 | 99 | 93 | 88 | 84 | 90 | 86 | 83 | 88 | 84 | 81 | 86 | 83 | 80 | 79 | 79 | 79 | 79 |
| 4 | 96 | 88 | 82 | 77 | 94 | 86 | 81 | 77 | 84 | 79 | 76 | 82 | 78 | 75 | 80 | 77 | 74 | 72 | 72 | 72 | 72 |
| 5 | 90 | 81 | 75 | 71 | 89 | 80 | 75 | 70 | 79 | 74 | 70 | 77 | 73 | 69 | 75 | 72 | 68 | 67 | 67 | 67 | 67 |
| 6 | 85 | 76 | 70 | 65 | 84 | 75 | 69 | 65 | 74 | 68 | 64 | 72 | 67 | 64 | 71 | 67 | 63 | 62 | 62 | 62 | 62 |
| 7 | 81 | 71 | 65 | 60 | 79 | 70 | 64 | 60 | 69 | 64 | 60 | 68 | 63 | 59 | 67 | 62 | 59 | 57 | 57 | 57 | 57 |
| 8 | 77 | 67 | 60 | 56 | 75 | 66 | 60 | 56 | 65 | 59 | 55 | 64 | 59 | 55 | 63 | 58 | 55 | 53 | 53 | 53 | 53 |
| 9 | 73 | 62 | 56 | 52 | 72 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 52 | 59 | 55 | 51 | 50 | 50 | 50 | 50 |
| 10 | 69 | 59 | 53 | 49 | 68 | 58 | 52 | 48 | 57 | 52 | 48 | 57 | 52 | 48 | 56 | 51 | 48 | 47 | 47 | 47 | 47 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 247480 |
| 5° | 247270 |
| 10° | 244690 |
| 15° | 239774 |
| 20° | 227135 |
| 25° | 205113 |
| 30° | 174242 |
| 35° | 128646 |
| 40° | 74397 |
| 45° | 39492 |
| 50° | 22311 |
| 55° | 11670 |
| 60° | 7653 |
| 65° | 5422 |
| 70° | 3911 |
| 75° | 2944 |
| 80° | 2210 |
| 85° | 2201 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 425.8 | 8.6 |
| 10°-20° | 1181.6 | 23.9 |
| 20°-30° | 1542.3 | 31.2 |
| 30°-40° | 1178.6 | 23.9 |
| 40°-50° | 426.7 | 8.6 |
| 50°-60° | 123.9 | 2.5 |
| 60°-70° | 44.3 | 0.9 |
| 70°-80° | 15.2 | 0.3 |
| 80°-90° | 2.9 | 0.1 |
| 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° | 3149.7 | 63.7 |
| 0°-40° | 4328.3 | 87.6 |
| 0°-60° | 4878.9 | 98.7 |
| 0°-90° | 4941.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4941.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 4514 | |
| 5° | 4493 | 426 |
| 15° | 4225 | 1182 |
| 25° | 3391 | 1542 |
| 35° | 1922 | 1179 |
| 45° | 509 | 427 |
| 55° | 122 | 124 |
| 65° | 42 | 44 |
| 75° | 14 | 15 |
| 85° | 4 | 3 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 4514.4 |
| 2.5° | 4493.4 |
| 5° | 4493.4 |
| 7.5° | 4462.1 |
| 10° | 4395.7 |
| 12.5° | 4318.9 |
| 15° | 4224.8 |
| 17.5° | 4085.2 |
| 20° | 3893.4 |
| 22.5° | 3656.1 |
| 25° | 3391.0 |
| 27.5° | 3090.9 |
| 30° | 2752.6 |
| 32.5° | 2372.3 |
| 35° | 1922.3 |
| 37.5° | 1451.3 |
| 40° | 1039.6 |
| 42.5° | 718.6 |
| 45° | 509.4 |
| 47.5° | 366.3 |
| 50° | 261.6 |
| 52.5° | 184.9 |
| 55° | 122.1 |
| 57.5° | 87.2 |
| 60° | 69.8 |
| 62.5° | 55.9 |
| 65° | 41.8 |
| 67.5° | 34.8 |
| 70° | 24.4 |
| 72.5° | 17.5 |
| 75° | 13.9 |
| 77.5° | 10.5 |
| 80° | 7.0 |
| 82.5° | 3.5 |
| 85° | 3.5 |
| 87.5° | 0.0 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)