

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: P583088

Luminaire Tested: **HC655D010-HM64560930-61RWWC**

Issue Date: 9/16/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P583088  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-14)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC655D010-HM64560930-61RWWC  
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5006.2 lumens  
Efficiency: N/A  
Efficacy: 96.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.15 / 1.2  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

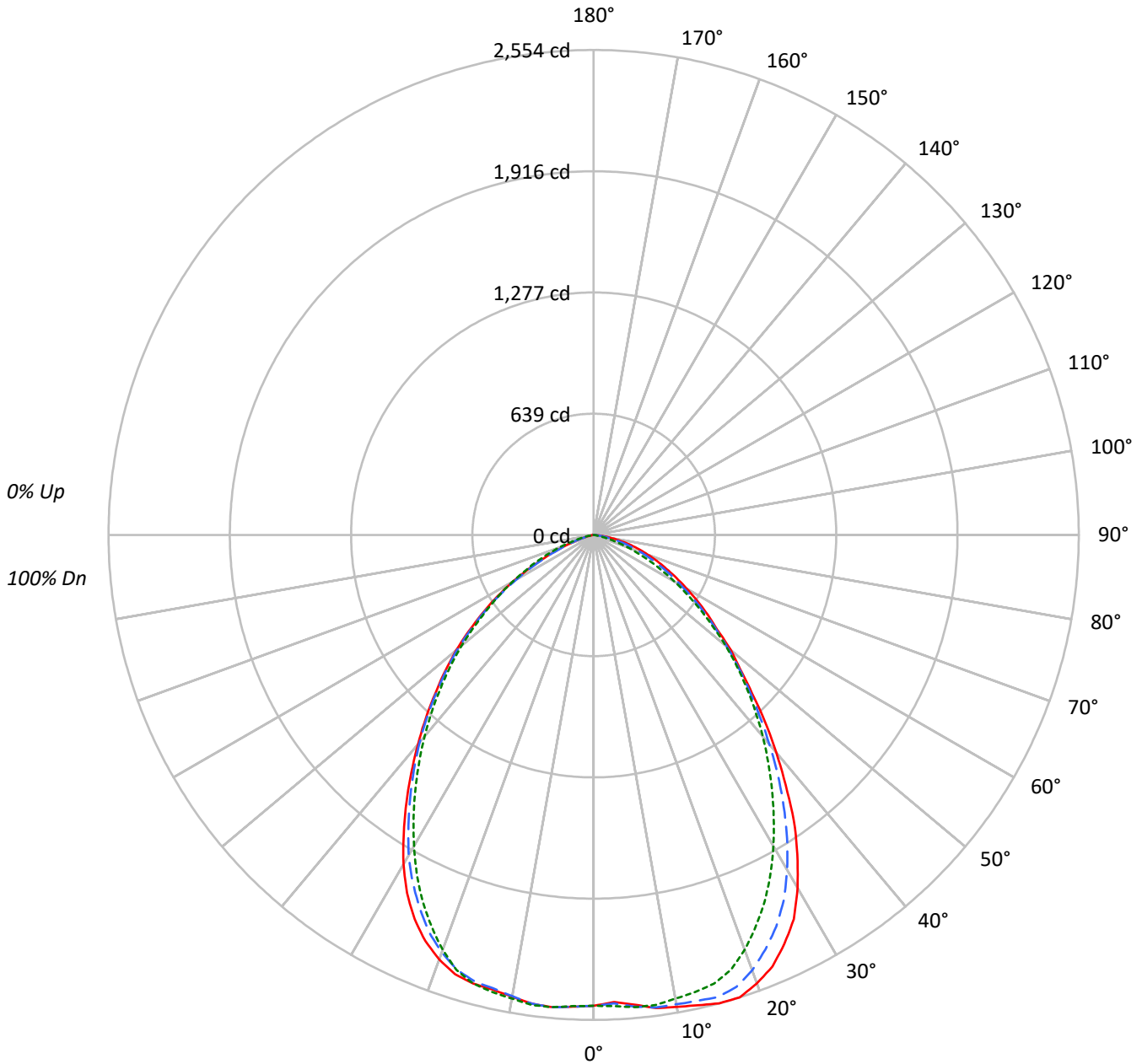
Input Watts (W): 52  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P583088

CATALOG NUMBER: HC655D010-HM64560930-61RWWC

### Luminous Intensity Polar Plot





TEST NUMBER: P583088

CATALOG NUMBER: HC655D010-HM64560930-61RWWC

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20  |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |     |     |     | 20 |    |   |  |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| RC  | 80  |     |     |     |     |     |     |     |     | 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   | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99  | 101 | 98  | 96  | 97  | 95  | 93  | 94  | 92  | 90  | 88  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 103 | 96  | 90  | 86  | 100 | 94  | 89  | 85  | 91  | 86  | 83  | 88  | 84  | 81  | 85  | 82  | 79  | 77  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 95  | 86  | 79  | 74  | 93  | 85  | 78  | 73  | 82  | 76  | 72  | 79  | 75  | 71  | 77  | 73  | 69  | 68  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 88  | 78  | 70  | 64  | 86  | 76  | 69  | 64  | 74  | 68  | 63  | 72  | 67  | 62  | 70  | 65  | 61  | 60  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 82  | 70  | 62  | 57  | 80  | 69  | 62  | 56  | 67  | 61  | 56  | 65  | 60  | 55  | 64  | 59  | 55  | 53  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 76  | 64  | 56  | 50  | 74  | 63  | 56  | 50  | 62  | 55  | 50  | 60  | 54  | 49  | 58  | 53  | 49  | 47  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 71  | 59  | 51  | 45  | 69  | 58  | 50  | 45  | 56  | 50  | 45  | 55  | 49  | 45  | 54  | 48  | 44  | 42  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 66  | 54  | 46  | 41  | 65  | 53  | 46  | 41  | 52  | 45  | 41  | 51  | 45  | 40  | 50  | 44  | 40  | 38  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 62  | 50  | 42  | 37  | 61  | 49  | 42  | 37  | 48  | 42  | 37  | 47  | 41  | 37  | 46  | 41  | 37  | 35  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 59  | 46  | 39  | 34  | 57  | 46  | 39  | 34  | 45  | 38  | 34  | 44  | 38  | 34  | 43  | 38  | 34  | 32  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°     | 90°    | 180°   |
|-----|--------|--------|--------|
| 0°  | 135938 | 135938 | 135938 |
| 5°  | 136638 | 137381 | 137381 |
| 10° | 140462 | 138035 | 137472 |
| 15° | 144927 | 138826 | 138826 |
| 20° | 146622 | 135643 | 138781 |
| 25° | 143694 | 128850 | 134947 |
| 30° | 135907 | 119746 | 126766 |
| 35° | 122998 | 109506 | 114907 |
| 40° | 107000 | 99064  | 102914 |
| 45° | 91428  | 88304  | 91428  |
| 50° | 80236  | 77371  | 80526  |
| 55° | 70009  | 65192  | 67763  |
| 60° | 61892  | 54151  | 53417  |
| 65° | 54922  | 42702  | 36619  |
| 70° | 48470  | 30165  | 22071  |
| 75° | 41260  | 17093  | 10675  |
| 80° | 30780  | 5304   | 3189   |
| 85° | 16920  | 2076   | 2076   |



TEST NUMBER: P583088

CATALOG NUMBER: HC655D010-HM64560930-61RWWC

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 237.9  | 4.8       |
| 10°-20°   | 695.9  | 13.9      |
| 20°-30°   | 1016.4 | 20.3      |
| 30°-40°   | 1066.0 | 21.3      |
| 40°-50°   | 898.0  | 17.9      |
| 50°-60°   | 629.2  | 12.6      |
| 60°-70°   | 337.3  | 6.7       |
| 70°-80°   | 113.1  | 2.3       |
| 80°-90°   | 12.3   | 0.2       |
| 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°    | 1950.2 | 39.0      |
| 0°-40°    | 3016.2 | 60.2      |
| 0°-60°    | 4543.4 | 90.8      |
| 0°-90°    | 5006.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5006.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 2480 | 2480 | 2480 | 2480 | 2480 |      |
| 5°  | 2483 | 2493 | 2496 | 2496 | 2496 | 239  |
| 15° | 2554 | 2520 | 2446 | 2433 | 2446 | 720  |
| 25° | 2376 | 2275 | 2130 | 2167 | 2231 | 1088 |
| 35° | 1838 | 1744 | 1636 | 1683 | 1717 | 1141 |
| 45° | 1179 | 1159 | 1139 | 1169 | 1179 | 919  |
| 55° | 732  | 709  | 682  | 696  | 709  | 659  |
| 65° | 423  | 386  | 329  | 272  | 282  | 423  |
| 75° | 195  | 151  | 81   | 50   | 50   | 207  |
| 85° | 27   | 14   | 3    | 3    | 3    | 37   |
| 90° | 0    | 0    | 0    | 0    | 0    |      |



TEST NUMBER: P583088

CATALOG NUMBER: HC655D010-HM64560930-61RWWC

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2479.7 | 2479.7 | 2479.7 | 2479.7 | 2479.7 | 2479.7 | 2479.7 | 2479.7 | 2479.7 |
| 2.5°  | 2462.9 | 2462.9 | 2469.6 | 2476.4 | 2483.0 | 2483.0 | 2486.4 | 2489.7 | 2486.4 |
| 5°    | 2483.0 | 2483.0 | 2493.2 | 2496.5 | 2496.5 | 2493.2 | 2496.5 | 2496.5 | 2496.5 |
| 7.5°  | 2513.3 | 2506.5 | 2510.0 | 2503.2 | 2496.5 | 2493.2 | 2489.7 | 2489.7 | 2489.7 |
| 10°   | 2523.3 | 2516.6 | 2510.0 | 2496.5 | 2479.7 | 2469.6 | 2466.2 | 2469.6 | 2469.6 |
| 12.5° | 2536.8 | 2530.1 | 2513.3 | 2486.4 | 2466.2 | 2449.4 | 2446.1 | 2452.8 | 2452.8 |
| 15°   | 2553.6 | 2546.9 | 2520.0 | 2476.4 | 2446.1 | 2429.3 | 2432.6 | 2439.3 | 2446.1 |
| 17.5° | 2553.6 | 2540.1 | 2496.5 | 2439.3 | 2402.4 | 2385.6 | 2399.0 | 2415.8 | 2426.0 |
| 20°   | 2513.3 | 2499.8 | 2439.3 | 2368.8 | 2325.1 | 2315.0 | 2338.6 | 2368.8 | 2378.9 |
| 22.5° | 2459.6 | 2432.6 | 2362.1 | 2278.1 | 2231.0 | 2231.0 | 2264.6 | 2301.6 | 2315.0 |
| 25°   | 2375.6 | 2355.4 | 2274.7 | 2177.3 | 2130.2 | 2126.9 | 2167.3 | 2217.7 | 2231.0 |
| 27.5° | 2281.4 | 2254.6 | 2167.3 | 2066.3 | 2016.0 | 2019.4 | 2063.0 | 2113.4 | 2126.9 |
| 30°   | 2147.0 | 2113.4 | 2036.2 | 1938.7 | 1891.7 | 1905.1 | 1948.8 | 1985.8 | 2002.6 |
| 32.5° | 1995.8 | 1965.6 | 1895.0 | 1804.3 | 1764.0 | 1777.5 | 1814.4 | 1848.0 | 1861.5 |
| 35°   | 1837.9 | 1804.3 | 1743.9 | 1663.2 | 1636.3 | 1649.8 | 1683.4 | 1710.3 | 1717.0 |
| 37.5° | 1659.9 | 1636.3 | 1592.7 | 1528.8 | 1508.7 | 1525.5 | 1552.3 | 1569.1 | 1575.9 |
| 40°   | 1495.2 | 1475.1 | 1438.1 | 1391.1 | 1384.3 | 1397.7 | 1424.7 | 1434.7 | 1438.1 |
| 42.5° | 1334.0 | 1317.2 | 1293.6 | 1260.0 | 1260.0 | 1273.5 | 1296.9 | 1303.7 | 1307.1 |
| 45°   | 1179.3 | 1169.3 | 1159.2 | 1132.4 | 1139.0 | 1155.8 | 1169.3 | 1179.3 | 1179.3 |
| 47.5° | 1044.9 | 1048.4 | 1034.9 | 1014.8 | 1021.4 | 1038.2 | 1048.4 | 1058.4 | 1058.4 |
| 50°   | 940.8  | 930.7  | 917.3  | 897.1  | 907.2  | 920.6  | 934.1  | 940.8  | 944.2  |
| 52.5° | 819.8  | 816.5  | 806.5  | 782.9  | 789.7  | 796.3  | 809.8  | 819.8  | 823.2  |
| 55°   | 732.5  | 722.5  | 709.0  | 682.1  | 682.1  | 688.7  | 695.5  | 702.2  | 709.0  |
| 57.5° | 648.5  | 638.3  | 618.2  | 588.0  | 584.6  | 584.6  | 581.3  | 588.0  | 598.1  |
| 60°   | 564.5  | 561.1  | 530.9  | 504.0  | 493.9  | 483.8  | 470.4  | 473.8  | 487.2  |
| 62.5° | 490.6  | 483.8  | 457.0  | 423.4  | 403.2  | 386.4  | 369.6  | 366.3  | 379.6  |
| 65°   | 423.4  | 416.7  | 386.4  | 352.8  | 329.2  | 299.1  | 272.2  | 272.2  | 282.3  |
| 67.5° | 362.8  | 349.5  | 322.6  | 285.6  | 255.4  | 218.4  | 191.5  | 198.3  | 201.6  |
| 70°   | 302.4  | 292.3  | 262.0  | 225.1  | 188.2  | 151.2  | 134.4  | 137.7  | 137.7  |
| 72.5° | 248.7  | 235.2  | 205.0  | 168.0  | 131.1  | 97.5   | 90.7   | 87.3   | 87.3   |
| 75°   | 194.8  | 181.5  | 151.2  | 114.3  | 80.7   | 57.1   | 50.4   | 50.4   | 50.4   |
| 77.5° | 141.1  | 131.1  | 104.1  | 70.5   | 43.7   | 26.9   | 23.5   | 20.1   | 20.1   |
| 80°   | 97.5   | 87.3   | 63.9   | 36.9   | 16.8   | 10.1   | 10.1   | 10.1   | 10.1   |
| 82.5° | 57.1   | 47.1   | 30.3   | 16.8   | 6.7    | 3.3    | 3.3    | 3.3    | 3.3    |
| 85°   | 26.9   | 20.1   | 13.5   | 6.7    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3    |
| 87.5° | 3.3    | 3.3    | 3.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



Report Generated By 670245859 / DESKTOP-HRDQ47P







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)