

Classified
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P582701

Luminaire Tested: **HCC6S45D010BZ-HM64560940-61WWWB**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582701
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC6S45D010BZ-HM64560940-61WWWB
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WALLWASH DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

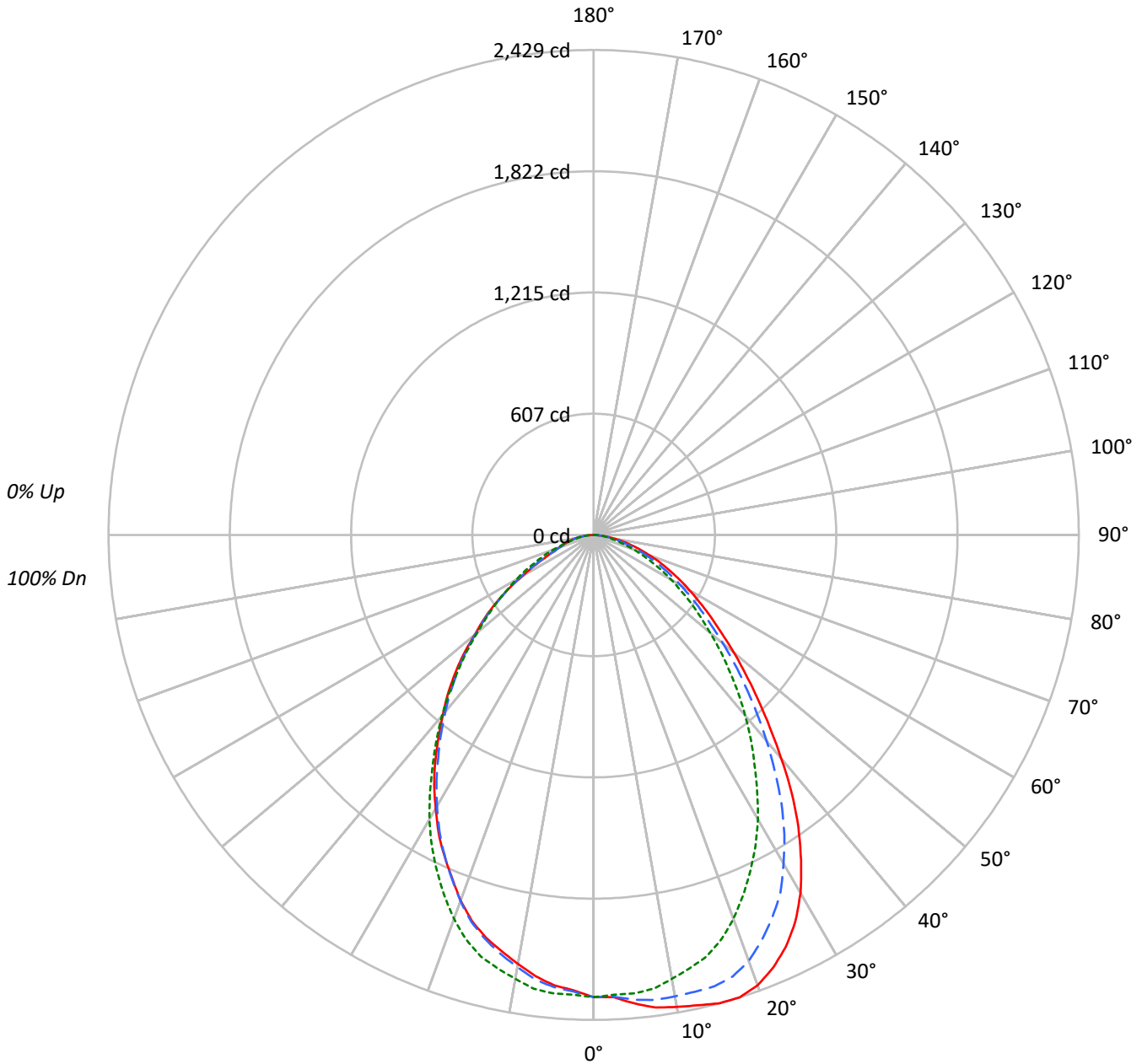
Lumens per Lamp: N/A
Luminaire Lumens: 4533.1 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 44
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 | | | | | | | | |
| 1 | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98 | 100 | 97 | 95 | 96 | 94 | 92 | 93 | 91 | 89 | 87 | | | | | | | | |
| 2 | 102 | 95 | 89 | 84 | 100 | 93 | 88 | 83 | 90 | 85 | 81 | 87 | 83 | 80 | 84 | 81 | 78 | 76 | | | | | | | | |
| 3 | 94 | 85 | 78 | 72 | 92 | 84 | 77 | 72 | 81 | 75 | 71 | 78 | 73 | 69 | 76 | 72 | 68 | 66 | | | | | | | | |
| 4 | 87 | 77 | 69 | 63 | 85 | 75 | 68 | 63 | 73 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 60 | 58 | | | | | | | | |
| 5 | 81 | 70 | 61 | 56 | 79 | 68 | 61 | 55 | 66 | 60 | 55 | 65 | 59 | 54 | 63 | 58 | 54 | 52 | | | | | | | | |
| 6 | 75 | 63 | 55 | 49 | 74 | 62 | 55 | 49 | 61 | 54 | 49 | 59 | 53 | 48 | 58 | 52 | 48 | 46 | | | | | | | | |
| 7 | 70 | 58 | 50 | 44 | 69 | 57 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 43 | 42 | | | | | | | | |
| 8 | 66 | 53 | 46 | 40 | 64 | 53 | 45 | 40 | 51 | 45 | 40 | 50 | 44 | 40 | 49 | 44 | 39 | 38 | | | | | | | | |
| 9 | 62 | 49 | 42 | 37 | 60 | 49 | 42 | 37 | 48 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 34 | | | | | | | | |
| 10 | 58 | 46 | 38 | 34 | 57 | 45 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 43 | 37 | 33 | 31 | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|--------|--------|
| 0° | 126898 | 126898 | 126898 |
| 5° | 129644 | 126860 | 124592 |
| 10° | 133609 | 125682 | 121457 |
| 15° | 137833 | 124013 | 118451 |
| 20° | 140024 | 119355 | 113637 |
| 25° | 137718 | 112283 | 107117 |
| 30° | 131115 | 104086 | 100085 |
| 35° | 119571 | 93967 | 92481 |
| 40° | 104553 | 84415 | 83957 |
| 45° | 89978 | 74279 | 76000 |
| 50° | 78215 | 64723 | 66079 |
| 55° | 68308 | 56820 | 57422 |
| 60° | 60675 | 49229 | 45073 |
| 65° | 54156 | 41431 | 34465 |
| 70° | 47636 | 33948 | 28899 |
| 75° | 40837 | 26773 | 27450 |
| 80° | 32959 | 22951 | 26961 |
| 85° | 21889 | 19939 | 23902 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 219.2 | 4.8 |
| 10°-20° | 623.9 | 13.8 |
| 20°-30° | 890.7 | 19.6 |
| 30°-40° | 932.9 | 20.6 |
| 40°-50° | 785.5 | 17.3 |
| 50°-60° | 559.1 | 12.3 |
| 60°-70° | 327.2 | 7.2 |
| 70°-80° | 154.8 | 3.4 |
| 80°-90° | 39.8 | 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° | 1733.7 | 38.2 |
| 0°-40° | 2666.7 | 58.8 |
| 0°-60° | 4011.2 | 88.5 |
| 0°-90° | 4533.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4533.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 2315 | 2315 | 2315 | 2315 | 2315 | |
| 5° | 2356 | 2337 | 2305 | 2274 | 2264 | 226 |
| 15° | 2429 | 2340 | 2185 | 2097 | 2087 | 685 |
| 25° | 2277 | 2116 | 1856 | 1768 | 1771 | 1042 |
| 35° | 1787 | 1638 | 1404 | 1357 | 1382 | 1110 |
| 45° | 1161 | 1075 | 958 | 961 | 980 | 901 |
| 55° | 715 | 654 | 594 | 594 | 601 | 644 |
| 65° | 418 | 370 | 319 | 269 | 266 | 416 |
| 75° | 193 | 161 | 126 | 123 | 130 | 207 |
| 85° | 35 | 28 | 32 | 38 | 38 | 45 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2314.8 | 2314.8 | 2314.8 | 2314.8 | 2314.8 | 2314.8 | 2314.8 | 2314.8 | 2314.8 |
| 2.5° | 2318.0 | 2318.0 | 2314.8 | 2311.6 | 2305.3 | 2295.8 | 2289.5 | 2283.1 | 2283.1 |
| 5° | 2355.9 | 2349.5 | 2336.9 | 2321.1 | 2305.3 | 2286.3 | 2273.6 | 2264.1 | 2264.1 |
| 7.5° | 2387.5 | 2374.9 | 2349.5 | 2321.1 | 2292.6 | 2267.3 | 2245.2 | 2232.6 | 2229.4 |
| 10° | 2400.2 | 2384.4 | 2346.4 | 2302.1 | 2257.8 | 2223.1 | 2197.7 | 2181.9 | 2181.9 |
| 12.5° | 2412.7 | 2393.9 | 2343.2 | 2280.0 | 2223.1 | 2175.6 | 2150.3 | 2137.7 | 2134.5 |
| 15° | 2428.6 | 2403.4 | 2340.0 | 2261.0 | 2185.1 | 2131.3 | 2096.6 | 2087.1 | 2087.1 |
| 17.5° | 2428.6 | 2397.0 | 2318.0 | 2219.9 | 2125.0 | 2064.9 | 2033.3 | 2023.8 | 2026.9 |
| 20° | 2400.2 | 2365.4 | 2270.5 | 2150.3 | 2045.9 | 1982.7 | 1951.1 | 1944.8 | 1947.9 |
| 22.5° | 2346.4 | 2305.3 | 2197.7 | 2068.1 | 1954.2 | 1887.8 | 1859.4 | 1859.4 | 1856.3 |
| 25° | 2276.8 | 2232.6 | 2115.5 | 1979.6 | 1856.3 | 1789.9 | 1767.7 | 1770.9 | 1770.9 |
| 27.5° | 2185.1 | 2140.8 | 2023.8 | 1878.3 | 1755.0 | 1688.7 | 1672.8 | 1679.1 | 1682.3 |
| 30° | 2071.3 | 2023.8 | 1900.5 | 1758.2 | 1644.3 | 1577.9 | 1568.4 | 1577.9 | 1581.1 |
| 32.5° | 1932.2 | 1897.3 | 1777.2 | 1631.8 | 1524.2 | 1467.3 | 1464.1 | 1473.6 | 1486.3 |
| 35° | 1786.7 | 1748.7 | 1638.1 | 1505.2 | 1404.1 | 1356.6 | 1356.6 | 1372.4 | 1381.9 |
| 37.5° | 1628.6 | 1590.6 | 1489.4 | 1378.7 | 1293.3 | 1249.1 | 1255.5 | 1271.2 | 1274.3 |
| 40° | 1461.0 | 1432.5 | 1347.1 | 1252.3 | 1179.6 | 1144.7 | 1154.2 | 1170.1 | 1173.2 |
| 42.5° | 1302.9 | 1277.5 | 1208.0 | 1122.6 | 1068.8 | 1043.5 | 1056.2 | 1075.2 | 1081.5 |
| 45° | 1160.6 | 1132.1 | 1075.2 | 1002.4 | 958.1 | 945.6 | 961.3 | 973.9 | 980.3 |
| 47.5° | 1030.8 | 1005.6 | 958.1 | 891.7 | 860.2 | 853.8 | 869.7 | 876.0 | 882.2 |
| 50° | 917.1 | 891.7 | 844.3 | 784.3 | 758.9 | 758.9 | 771.6 | 777.9 | 774.8 |
| 52.5° | 806.3 | 784.3 | 739.9 | 689.4 | 673.5 | 673.5 | 683.0 | 686.2 | 692.5 |
| 55° | 714.7 | 692.5 | 654.5 | 607.1 | 594.5 | 588.1 | 594.5 | 594.5 | 600.8 |
| 57.5° | 629.3 | 610.3 | 575.5 | 531.3 | 515.4 | 509.1 | 505.9 | 502.7 | 509.1 |
| 60° | 553.4 | 537.6 | 499.6 | 461.7 | 449.0 | 433.2 | 420.5 | 408.0 | 411.1 |
| 62.5° | 483.9 | 468.0 | 433.2 | 395.3 | 382.6 | 360.5 | 344.6 | 328.9 | 335.2 |
| 65° | 417.5 | 401.6 | 370.0 | 338.4 | 319.4 | 294.1 | 268.7 | 259.4 | 265.7 |
| 67.5° | 357.3 | 344.6 | 313.1 | 281.4 | 265.7 | 237.2 | 211.8 | 211.8 | 215.0 |
| 70° | 297.2 | 284.6 | 259.4 | 230.8 | 211.8 | 186.6 | 177.1 | 180.3 | 180.3 |
| 72.5° | 243.5 | 234.0 | 208.7 | 183.5 | 164.5 | 148.6 | 148.6 | 151.8 | 155.0 |
| 75° | 192.8 | 186.6 | 161.3 | 139.1 | 126.4 | 116.9 | 123.3 | 126.4 | 129.6 |
| 77.5° | 148.6 | 139.1 | 120.1 | 104.4 | 94.9 | 98.1 | 104.4 | 107.6 | 110.7 |
| 80° | 104.4 | 101.2 | 85.4 | 75.9 | 72.7 | 75.9 | 82.2 | 85.4 | 85.4 |
| 82.5° | 66.4 | 63.2 | 53.7 | 50.6 | 50.6 | 53.7 | 60.1 | 60.1 | 60.1 |
| 85° | 34.8 | 31.7 | 28.5 | 28.5 | 31.7 | 34.8 | 38.0 | 38.0 | 38.0 |
| 87.5° | 12.7 | 9.5 | 12.7 | 12.7 | 15.8 | 15.8 | 15.8 | 15.8 | 15.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report



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

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