

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: P584769

Luminaire Tested: **HCC8W45D010SL-HM82555940-81RWWC**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584769  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-14)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC8W45D010SL-HM82555940-81RWWC  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5003.8 lumens  
Efficiency: N/A  
Efficacy: 113.7 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.08 / 1.17  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

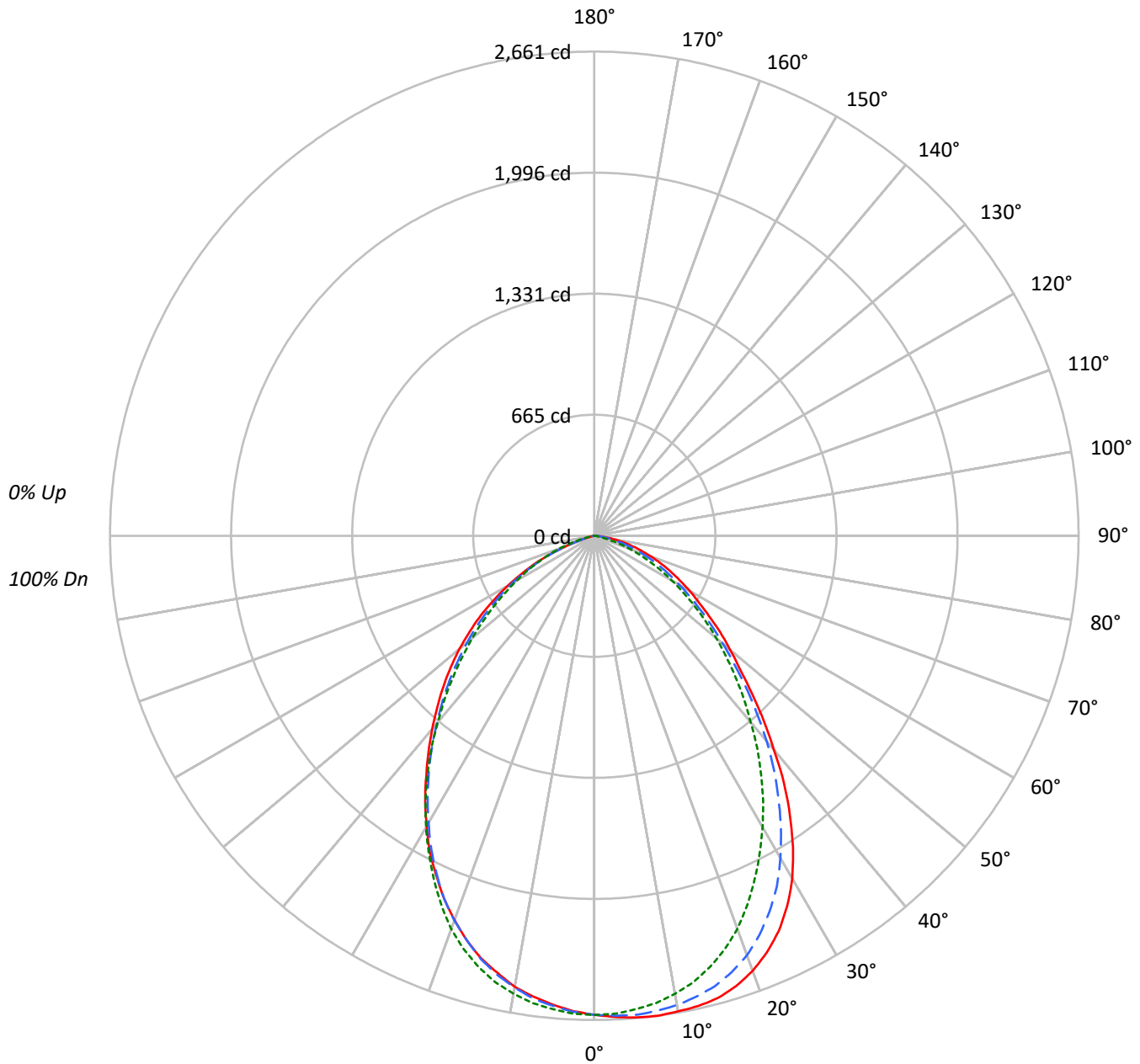
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P584769

CATALOG NUMBER: HCC8W45D010SL-HM82555940-81RWWC

### Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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

|     |     |     |     |     |     |     |     |     |  |     |     |     |  |  |     |     |     |  |  |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|--|-----|-----|-----|--|--|-----|
| RF  | 20  |     |     |     | 20  |     |     |     |  | 20  |     |     |  |  | 20  |     |     |  |  | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     |  | 50  |     |     |  |  | 30  |     |     |  |  | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  |  | 50  | 30  | 10  |  |  | 50  | 30  | 10  |  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |  |     |     |     |  |  |     |     |     |  |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 |  | 111 | 111 | 111 |  |  | 106 | 106 | 106 |  |  | 102 |
| 1   | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99  |  | 101 | 98  | 96  |  |  | 97  | 95  | 93  |  |  | 93  |
| 2   | 103 | 96  | 90  | 85  | 100 | 94  | 89  | 84  |  | 91  | 86  | 82  |  |  | 87  | 84  | 81  |  |  | 84  |
| 3   | 95  | 86  | 79  | 73  | 93  | 84  | 78  | 73  |  | 82  | 76  | 72  |  |  | 79  | 74  | 70  |  |  | 76  |
| 4   | 88  | 77  | 70  | 64  | 86  | 76  | 69  | 64  |  | 74  | 68  | 63  |  |  | 72  | 66  | 62  |  |  | 69  |
| 5   | 81  | 70  | 62  | 56  | 80  | 69  | 62  | 56  |  | 67  | 61  | 56  |  |  | 65  | 59  | 55  |  |  | 63  |
| 6   | 76  | 64  | 56  | 50  | 74  | 63  | 55  | 50  |  | 61  | 55  | 50  |  |  | 60  | 54  | 49  |  |  | 58  |
| 7   | 71  | 59  | 51  | 45  | 69  | 58  | 50  | 45  |  | 56  | 50  | 45  |  |  | 55  | 49  | 44  |  |  | 54  |
| 8   | 66  | 54  | 46  | 41  | 65  | 53  | 46  | 41  |  | 52  | 45  | 40  |  |  | 51  | 45  | 40  |  |  | 50  |
| 9   | 62  | 50  | 42  | 37  | 61  | 49  | 42  | 37  |  | 48  | 42  | 37  |  |  | 47  | 41  | 37  |  |  | 46  |
| 10  | 58  | 46  | 39  | 34  | 57  | 46  | 39  | 34  |  | 45  | 38  | 34  |  |  | 44  | 38  | 34  |  |  | 43  |

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

|     | 0°    | 90°   | 180°  |
|-----|-------|-------|-------|
| 0°  | 81186 | 81186 | 81186 |
| 5°  | 82257 | 80843 | 80081 |
| 10° | 83099 | 80018 | 78806 |
| 15° | 83938 | 78329 | 76755 |
| 20° | 83512 | 75436 | 73710 |
| 25° | 81566 | 70920 | 69967 |
| 30° | 77473 | 65833 | 65588 |
| 35° | 70526 | 60076 | 60603 |
| 40° | 61830 | 53767 | 55752 |
| 45° | 53343 | 47830 | 51201 |
| 50° | 46711 | 41991 | 46375 |
| 55° | 41386 | 36095 | 40821 |
| 60° | 37287 | 30349 | 33821 |
| 65° | 33600 | 24370 | 25910 |
| 70° | 29473 | 17743 | 14263 |
| 75° | 25127 | 9210  | 3777  |
| 80° | 19356 | 2504  | 622   |
| 85° | 12454 | 0     | 0     |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P584769

CATALOG NUMBER: HCC8W45D010SL-HM82555940-81RWWC

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 248.4  | 5.0       |
| 10°-20°   | 698.3  | 14.0      |
| 20°-30°   | 991.2  | 19.8      |
| 30°-40°   | 1043.3 | 20.9      |
| 40°-50°   | 887.6  | 17.7      |
| 50°-60°   | 641.4  | 12.8      |
| 60°-70°   | 364.8  | 7.3       |
| 70°-80°   | 115.0  | 2.3       |
| 80°-90°   | 14.0   | 0.3       |
| 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°    | 1937.9 | 38.7      |
| 0°-40°    | 2981.2 | 59.6      |
| 0°-60°    | 4510.1 | 90.1      |
| 0°-90°    | 5003.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5003.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 2633 | 2633 | 2633 | 2633 | 2633 |      |
| 5°  | 2657 | 2643 | 2612 | 2594 | 2587 | 254  |
| 15° | 2629 | 2562 | 2454 | 2408 | 2404 | 740  |
| 25° | 2397 | 2278 | 2084 | 2049 | 2056 | 1098 |
| 35° | 1874 | 1764 | 1596 | 1585 | 1610 | 1166 |
| 45° | 1223 | 1178 | 1097 | 1125 | 1174 | 951  |
| 55° | 770  | 714  | 671  | 710  | 759  | 694  |
| 65° | 460  | 397  | 334  | 330  | 355  | 457  |
| 75° | 211  | 162  | 77   | 35   | 32   | 227  |
| 85° | 35   | 21   | 0    | 0    | 0    | 45   |
| 90° | 0    | 0    | 0    | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 25°    | 30°    | 35°    | 40°    | 45°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 |
| 2.5°  | 2646.9 | 2650.4 | 2643.4 | 2643.4 | 2650.4 | 2643.4 | 2646.9 | 2646.9 | 2643.4 | 2643.4 | 2639.8 |
| 5°    | 2657.4 | 2653.9 | 2653.9 | 2653.9 | 2657.4 | 2650.4 | 2646.9 | 2650.4 | 2643.4 | 2643.4 | 2643.4 |
| 7.5°  | 2661.0 | 2661.0 | 2657.4 | 2653.9 | 2653.9 | 2653.9 | 2650.4 | 2646.9 | 2643.4 | 2636.3 | 2632.8 |
| 10°   | 2653.9 | 2653.9 | 2657.4 | 2650.4 | 2650.4 | 2643.4 | 2643.4 | 2636.3 | 2636.3 | 2629.3 | 2618.7 |
| 12.5° | 2646.9 | 2643.4 | 2643.4 | 2636.3 | 2636.3 | 2629.3 | 2629.3 | 2618.7 | 2615.2 | 2604.6 | 2594.1 |
| 15°   | 2629.3 | 2625.8 | 2618.7 | 2615.2 | 2611.7 | 2608.2 | 2601.1 | 2597.6 | 2587.1 | 2573.1 | 2562.5 |
| 17.5° | 2594.1 | 2590.6 | 2587.1 | 2580.1 | 2573.1 | 2569.6 | 2566.1 | 2555.5 | 2541.4 | 2530.9 | 2513.3 |
| 20°   | 2544.9 | 2541.4 | 2541.4 | 2530.9 | 2527.3 | 2516.8 | 2513.3 | 2499.2 | 2488.6 | 2467.6 | 2453.6 |
| 22.5° | 2478.2 | 2481.6 | 2474.7 | 2467.6 | 2460.6 | 2450.0 | 2443.0 | 2428.9 | 2411.3 | 2390.2 | 2372.7 |
| 25°   | 2397.3 | 2400.8 | 2393.7 | 2386.7 | 2376.1 | 2369.2 | 2362.2 | 2341.1 | 2323.5 | 2298.8 | 2277.7 |
| 27.5° | 2295.3 | 2295.3 | 2295.3 | 2288.3 | 2270.7 | 2267.3 | 2260.3 | 2239.1 | 2214.5 | 2193.4 | 2172.3 |
| 30°   | 2175.8 | 2172.3 | 2172.3 | 2161.8 | 2154.8 | 2140.7 | 2130.2 | 2112.6 | 2095.0 | 2070.3 | 2045.8 |
| 32.5° | 2031.8 | 2035.3 | 2024.7 | 2017.7 | 2007.1 | 2007.1 | 1993.0 | 1979.0 | 1957.9 | 1933.3 | 1908.7 |
| 35°   | 1873.5 | 1877.0 | 1870.0 | 1866.5 | 1848.9 | 1845.5 | 1842.0 | 1824.4 | 1810.3 | 1792.7 | 1764.5 |
| 37.5° | 1711.9 | 1708.4 | 1704.8 | 1704.8 | 1694.3 | 1687.2 | 1680.2 | 1669.6 | 1648.5 | 1634.6 | 1620.5 |
| 40°   | 1536.0 | 1536.0 | 1536.0 | 1532.5 | 1529.1 | 1522.1 | 1518.6 | 1511.5 | 1497.5 | 1483.4 | 1472.8 |
| 42.5° | 1377.9 | 1377.9 | 1374.4 | 1370.9 | 1363.8 | 1367.4 | 1360.3 | 1353.3 | 1339.2 | 1328.7 | 1321.6 |
| 45°   | 1223.2 | 1223.2 | 1223.2 | 1226.7 | 1219.7 | 1209.2 | 1209.2 | 1202.2 | 1195.2 | 1188.1 | 1177.6 |
| 47.5° | 1086.2 | 1096.8 | 1089.7 | 1086.2 | 1089.7 | 1075.6 | 1075.6 | 1068.6 | 1061.6 | 1054.5 | 1040.5 |
| 50°   | 973.7  | 973.7  | 973.7  | 966.7  | 963.2  | 963.2  | 952.6  | 945.6  | 942.0  | 935.0  | 920.9  |
| 52.5° | 871.8  | 864.7  | 864.7  | 861.2  | 857.7  | 850.7  | 850.7  | 843.6  | 829.5  | 822.5  | 812.0  |
| 55°   | 769.8  | 769.8  | 766.3  | 762.8  | 759.3  | 755.8  | 752.2  | 741.7  | 734.6  | 724.1  | 713.5  |
| 57.5° | 678.5  | 685.5  | 682.0  | 674.9  | 667.9  | 667.9  | 660.9  | 653.8  | 643.3  | 632.7  | 622.2  |
| 60°   | 604.6  | 601.0  | 601.0  | 597.5  | 590.5  | 587.0  | 583.5  | 573.0  | 562.5  | 551.9  | 541.3  |
| 62.5° | 527.3  | 527.3  | 527.3  | 520.2  | 513.2  | 509.7  | 506.1  | 499.1  | 485.0  | 474.6  | 467.6  |
| 65°   | 460.5  | 457.0  | 453.5  | 450.0  | 446.4  | 439.4  | 435.9  | 428.8  | 418.3  | 407.7  | 397.2  |
| 67.5° | 393.7  | 390.1  | 390.1  | 386.6  | 376.1  | 372.5  | 372.5  | 362.1  | 351.5  | 341.0  | 330.4  |
| 70°   | 326.9  | 326.9  | 326.9  | 319.9  | 316.4  | 312.8  | 309.3  | 302.3  | 291.7  | 281.2  | 270.6  |
| 72.5° | 270.6  | 267.1  | 267.1  | 263.7  | 253.1  | 249.6  | 246.1  | 239.1  | 228.5  | 221.5  | 214.4  |
| 75°   | 210.9  | 210.9  | 207.4  | 203.9  | 200.3  | 196.8  | 193.3  | 186.3  | 175.7  | 165.2  | 161.6  |
| 77.5° | 161.6  | 158.2  | 158.2  | 154.7  | 147.7  | 144.2  | 144.2  | 137.1  | 126.6  | 119.5  | 112.5  |
| 80°   | 109.0  | 112.5  | 109.0  | 105.5  | 101.9  | 98.4   | 94.9   | 91.4   | 84.3   | 77.3   | 70.3   |
| 82.5° | 66.7   | 70.3   | 66.7   | 66.7   | 63.2   | 59.7   | 59.7   | 52.8   | 49.3   | 45.7   | 42.2   |
| 85°   | 35.2   | 35.2   | 35.2   | 35.2   | 31.7   | 31.7   | 31.7   | 28.2   | 24.6   | 21.1   | 21.1   |
| 87.5° | 10.6   | 14.1   | 10.6   | 10.6   | 10.6   | 10.6   | 10.6   | 10.6   | 7.0    | 7.0    | 7.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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**CANDELA DISTRIBUTION (continued):**

|       | 50°    | 55°    | 60°    | 65°    | 67.5°  | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 |
| 2.5°  | 2643.4 | 2639.8 | 2636.3 | 2636.3 | 2636.3 | 2636.3 | 2636.3 | 2632.8 | 2629.3 | 2629.3 | 2629.3 |
| 5°    | 2636.3 | 2636.3 | 2636.3 | 2632.8 | 2629.3 | 2629.3 | 2622.2 | 2618.7 | 2615.2 | 2611.7 | 2608.2 |
| 7.5°  | 2629.3 | 2622.2 | 2618.7 | 2615.2 | 2611.7 | 2611.7 | 2604.6 | 2597.6 | 2597.6 | 2590.6 | 2583.6 |
| 10°   | 2608.2 | 2604.6 | 2597.6 | 2590.6 | 2587.1 | 2583.6 | 2576.6 | 2566.1 | 2562.5 | 2555.5 | 2548.5 |
| 12.5° | 2583.6 | 2576.6 | 2569.6 | 2555.5 | 2552.0 | 2548.5 | 2534.4 | 2523.8 | 2516.8 | 2513.3 | 2495.7 |
| 15°   | 2552.0 | 2537.9 | 2527.3 | 2509.8 | 2506.2 | 2499.2 | 2488.6 | 2478.2 | 2464.1 | 2453.6 | 2446.5 |
| 17.5° | 2495.7 | 2481.6 | 2464.1 | 2446.5 | 2439.5 | 2439.5 | 2421.9 | 2407.8 | 2390.2 | 2383.2 | 2369.2 |
| 20°   | 2428.9 | 2411.3 | 2397.3 | 2376.1 | 2365.7 | 2355.1 | 2344.6 | 2323.5 | 2309.4 | 2298.8 | 2281.3 |
| 22.5° | 2351.6 | 2327.0 | 2309.4 | 2288.3 | 2270.7 | 2260.3 | 2242.7 | 2225.1 | 2207.5 | 2196.9 | 2182.8 |
| 25°   | 2253.2 | 2232.1 | 2203.9 | 2182.8 | 2172.3 | 2158.3 | 2137.2 | 2119.6 | 2102.0 | 2084.4 | 2077.4 |
| 27.5° | 2144.2 | 2116.1 | 2091.5 | 2066.8 | 2056.4 | 2045.8 | 2021.2 | 2000.1 | 1986.0 | 1968.4 | 1961.4 |
| 30°   | 2024.7 | 1996.6 | 1968.4 | 1947.4 | 1936.9 | 1919.3 | 1905.2 | 1880.6 | 1863.0 | 1848.9 | 1831.4 |
| 32.5° | 1887.6 | 1866.5 | 1842.0 | 1810.3 | 1803.3 | 1789.2 | 1768.1 | 1757.5 | 1736.5 | 1726.0 | 1711.9 |
| 35°   | 1740.0 | 1726.0 | 1701.3 | 1676.7 | 1666.1 | 1659.1 | 1641.5 | 1620.5 | 1606.4 | 1595.9 | 1588.8 |
| 37.5° | 1599.4 | 1581.8 | 1557.2 | 1539.6 | 1532.5 | 1522.1 | 1501.0 | 1490.4 | 1476.3 | 1469.3 | 1455.2 |
| 40°   | 1448.2 | 1430.6 | 1413.1 | 1402.6 | 1392.0 | 1385.0 | 1370.9 | 1360.3 | 1346.3 | 1335.7 | 1332.2 |
| 42.5° | 1300.6 | 1290.1 | 1276.0 | 1261.9 | 1258.4 | 1247.8 | 1240.8 | 1230.2 | 1219.7 | 1216.2 | 1205.7 |
| 45°   | 1167.0 | 1156.5 | 1142.4 | 1128.3 | 1124.8 | 1117.8 | 1114.2 | 1103.8 | 1096.8 | 1096.8 | 1096.8 |
| 47.5° | 1033.4 | 1022.9 | 1008.8 | 1001.9 | 1005.3 | 991.3  | 991.3  | 987.8  | 980.7  | 980.7  | 984.3  |
| 50°   | 913.9  | 899.8  | 896.4  | 889.4  | 882.3  | 875.3  | 878.8  | 868.3  | 868.3  | 875.3  | 871.8  |
| 52.5° | 801.4  | 787.4  | 783.9  | 776.9  | 773.4  | 773.4  | 769.8  | 769.8  | 766.3  | 769.8  | 769.8  |
| 55°   | 699.5  | 688.9  | 682.0  | 674.9  | 671.4  | 671.4  | 671.4  | 667.9  | 664.4  | 671.4  | 674.9  |
| 57.5° | 608.1  | 604.6  | 597.5  | 587.0  | 583.5  | 580.0  | 576.5  | 576.5  | 576.5  | 576.5  | 580.0  |
| 60°   | 527.3  | 520.2  | 513.2  | 502.6  | 502.6  | 499.1  | 495.6  | 492.1  | 492.1  | 492.1  | 492.1  |
| 62.5° | 457.0  | 446.4  | 435.9  | 428.8  | 425.3  | 421.8  | 418.3  | 411.3  | 411.3  | 411.3  | 411.3  |
| 65°   | 386.6  | 376.1  | 369.1  | 362.1  | 355.1  | 355.1  | 348.0  | 344.5  | 337.5  | 334.0  | 326.9  |
| 67.5° | 319.9  | 312.8  | 305.8  | 295.2  | 291.7  | 288.2  | 281.2  | 277.6  | 267.1  | 263.7  | 260.2  |
| 70°   | 260.2  | 249.6  | 242.6  | 235.5  | 232.0  | 225.0  | 217.9  | 210.9  | 203.9  | 196.8  | 189.8  |
| 72.5° | 203.9  | 193.3  | 186.3  | 179.2  | 172.2  | 172.2  | 161.6  | 154.7  | 144.2  | 137.1  | 126.6  |
| 75°   | 151.2  | 140.6  | 133.6  | 123.0  | 119.5  | 116.0  | 105.5  | 98.4   | 87.9   | 77.3   | 70.3   |
| 77.5° | 101.9  | 94.9   | 87.9   | 77.3   | 70.3   | 70.3   | 59.7   | 52.8   | 45.7   | 35.2   | 31.7   |
| 80°   | 63.2   | 56.2   | 49.3   | 42.2   | 42.2   | 35.2   | 31.7   | 24.6   | 17.6   | 14.1   | 10.6   |
| 82.5° | 35.2   | 31.7   | 28.2   | 21.1   | 21.1   | 17.6   | 14.1   | 10.6   | 7.0    | 3.5    | 3.5    |
| 85°   | 17.6   | 14.1   | 10.6   | 10.6   | 7.0    | 7.0    | 7.0    | 3.5    | 3.5    | 0.0    | 0.0    |
| 87.5° | 7.0    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 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    | 0.0    | 0.0    |

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**CANDELA DISTRIBUTION (continued):**

|       | 100°   | 105°   | 110°   | 112.5° | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 |
| 2.5°  | 2625.8 | 2625.8 | 2622.2 | 2622.2 | 2622.2 | 2618.7 | 2622.2 | 2618.7 | 2618.7 | 2618.7 | 2622.2 |
| 5°    | 2611.7 | 2604.6 | 2604.6 | 2601.1 | 2601.1 | 2597.6 | 2601.1 | 2597.6 | 2594.1 | 2590.6 | 2594.1 |
| 7.5°  | 2583.6 | 2576.6 | 2573.1 | 2569.6 | 2569.6 | 2569.6 | 2566.1 | 2562.5 | 2566.1 | 2555.5 | 2562.5 |
| 10°   | 2544.9 | 2541.4 | 2534.4 | 2530.9 | 2527.3 | 2530.9 | 2527.3 | 2520.3 | 2520.3 | 2520.3 | 2516.8 |
| 12.5° | 2495.7 | 2488.6 | 2485.1 | 2481.6 | 2474.7 | 2474.7 | 2478.2 | 2471.2 | 2471.2 | 2464.1 | 2464.1 |
| 15°   | 2436.0 | 2428.9 | 2421.9 | 2421.9 | 2414.9 | 2414.9 | 2411.3 | 2411.3 | 2407.8 | 2404.3 | 2404.3 |
| 17.5° | 2362.2 | 2351.6 | 2344.6 | 2348.1 | 2344.6 | 2341.1 | 2341.1 | 2334.0 | 2330.5 | 2334.0 | 2334.0 |
| 20°   | 2274.2 | 2267.3 | 2260.3 | 2263.8 | 2256.7 | 2253.2 | 2256.7 | 2246.2 | 2249.7 | 2249.7 | 2249.7 |
| 22.5° | 2175.8 | 2172.3 | 2161.8 | 2161.8 | 2154.8 | 2151.3 | 2154.8 | 2154.8 | 2158.3 | 2154.8 | 2154.8 |
| 25°   | 2066.8 | 2059.8 | 2052.9 | 2052.9 | 2049.3 | 2045.8 | 2049.3 | 2052.9 | 2049.3 | 2052.9 | 2052.9 |
| 27.5° | 1950.9 | 1940.4 | 1940.4 | 1933.3 | 1933.3 | 1936.9 | 1933.3 | 1936.9 | 1940.4 | 1940.4 | 1947.4 |
| 30°   | 1824.4 | 1820.8 | 1817.3 | 1813.8 | 1813.8 | 1817.3 | 1817.3 | 1817.3 | 1820.8 | 1827.9 | 1827.9 |
| 32.5° | 1704.8 | 1697.8 | 1690.8 | 1690.8 | 1697.8 | 1694.3 | 1697.8 | 1697.8 | 1704.8 | 1704.8 | 1711.9 |
| 35°   | 1574.8 | 1574.8 | 1567.7 | 1571.2 | 1571.2 | 1571.2 | 1571.2 | 1578.3 | 1585.3 | 1588.8 | 1595.9 |
| 37.5° | 1455.2 | 1444.7 | 1448.2 | 1448.2 | 1451.7 | 1448.2 | 1458.7 | 1458.7 | 1465.8 | 1465.8 | 1472.8 |
| 40°   | 1325.1 | 1325.1 | 1328.7 | 1325.1 | 1328.7 | 1328.7 | 1335.7 | 1342.7 | 1346.3 | 1353.3 | 1356.8 |
| 42.5° | 1202.2 | 1209.2 | 1202.2 | 1205.7 | 1209.2 | 1212.8 | 1216.2 | 1219.7 | 1233.8 | 1240.8 | 1251.4 |
| 45°   | 1089.7 | 1093.2 | 1096.8 | 1100.3 | 1096.8 | 1103.8 | 1107.3 | 1114.2 | 1124.8 | 1128.3 | 1131.8 |
| 47.5° | 980.7  | 984.3  | 987.8  | 991.3  | 991.3  | 998.3  | 1001.9 | 1008.8 | 1015.8 | 1019.3 | 1022.9 |
| 50°   | 875.3  | 882.3  | 885.8  | 885.8  | 889.4  | 896.4  | 903.3  | 903.3  | 910.4  | 920.9  | 924.4  |
| 52.5° | 780.4  | 780.4  | 787.4  | 791.0  | 794.4  | 794.4  | 804.9  | 808.4  | 812.0  | 819.0  | 826.0  |
| 55°   | 674.9  | 685.5  | 688.9  | 688.9  | 695.9  | 703.0  | 706.5  | 710.0  | 710.0  | 724.1  | 724.1  |
| 57.5° | 583.5  | 587.0  | 594.0  | 594.0  | 594.0  | 604.6  | 604.6  | 611.6  | 615.1  | 618.6  | 625.7  |
| 60°   | 492.1  | 499.1  | 499.1  | 502.6  | 499.1  | 506.1  | 509.7  | 516.7  | 520.2  | 523.7  | 527.3  |
| 62.5° | 407.7  | 407.7  | 411.3  | 411.3  | 411.3  | 411.3  | 418.3  | 418.3  | 425.3  | 428.8  | 432.4  |
| 65°   | 326.9  | 326.9  | 326.9  | 326.9  | 326.9  | 326.9  | 326.9  | 326.9  | 330.4  | 330.4  | 337.5  |
| 67.5° | 253.1  | 249.6  | 242.6  | 246.1  | 242.6  | 242.6  | 239.1  | 239.1  | 242.6  | 242.6  | 249.6  |
| 70°   | 182.8  | 179.2  | 172.2  | 172.2  | 168.7  | 165.2  | 161.6  | 158.2  | 154.7  | 154.7  | 154.7  |
| 72.5° | 119.5  | 112.5  | 101.9  | 98.4   | 98.4   | 91.4   | 84.3   | 80.8   | 80.8   | 80.8   | 80.8   |
| 75°   | 59.7   | 52.8   | 45.7   | 42.2   | 42.2   | 35.2   | 38.7   | 35.2   | 35.2   | 35.2   | 35.2   |
| 77.5° | 24.6   | 17.6   | 14.1   | 14.1   | 14.1   | 10.6   | 10.6   | 10.6   | 10.6   | 10.6   | 10.6   |
| 80°   | 7.0    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    |
| 82.5° | 3.5    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 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    | 0.0    | 0.0    |

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P584769

CATALOG NUMBER: HCC8W45D010SL-HM82555940-81RWWC

**CANDELA DISTRIBUTION (continued):**

|       | 150°   | 155°   | 157.5° | 160°   | 165°   | 170°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 | 2632.8 |
| 2.5°  | 2618.7 | 2618.7 | 2611.7 | 2615.2 | 2615.2 | 2615.2 | 2615.2 | 2615.2 |
| 5°    | 2587.1 | 2590.6 | 2587.1 | 2590.6 | 2590.6 | 2587.1 | 2587.1 | 2587.1 |
| 7.5°  | 2555.5 | 2559.0 | 2555.5 | 2559.0 | 2559.0 | 2559.0 | 2555.5 | 2555.5 |
| 10°   | 2516.8 | 2516.8 | 2516.8 | 2516.8 | 2516.8 | 2513.3 | 2516.8 | 2516.8 |
| 12.5° | 2464.1 | 2464.1 | 2464.1 | 2467.6 | 2467.6 | 2464.1 | 2464.1 | 2460.6 |
| 15°   | 2407.8 | 2400.8 | 2404.3 | 2407.8 | 2404.3 | 2404.3 | 2404.3 | 2404.3 |
| 17.5° | 2330.5 | 2334.0 | 2330.5 | 2330.5 | 2330.5 | 2330.5 | 2334.0 | 2330.5 |
| 20°   | 2249.7 | 2249.7 | 2253.2 | 2249.7 | 2249.7 | 2249.7 | 2249.7 | 2246.2 |
| 22.5° | 2158.3 | 2154.8 | 2154.8 | 2158.3 | 2158.3 | 2154.8 | 2158.3 | 2158.3 |
| 25°   | 2056.4 | 2059.8 | 2056.4 | 2056.4 | 2059.8 | 2059.8 | 2059.8 | 2056.4 |
| 27.5° | 1947.4 | 1950.9 | 1954.3 | 1950.9 | 1950.9 | 1950.9 | 1954.3 | 1957.9 |
| 30°   | 1834.9 | 1842.0 | 1834.9 | 1834.9 | 1842.0 | 1838.4 | 1842.0 | 1842.0 |
| 32.5° | 1715.4 | 1726.0 | 1718.9 | 1726.0 | 1726.0 | 1729.5 | 1726.0 | 1729.5 |
| 35°   | 1595.9 | 1606.4 | 1606.4 | 1606.4 | 1609.9 | 1613.5 | 1613.5 | 1609.9 |
| 37.5° | 1483.4 | 1486.9 | 1486.9 | 1493.9 | 1497.5 | 1501.0 | 1501.0 | 1497.5 |
| 40°   | 1367.4 | 1374.4 | 1377.9 | 1377.9 | 1377.9 | 1385.0 | 1392.0 | 1385.0 |
| 42.5° | 1254.9 | 1258.4 | 1261.9 | 1261.9 | 1269.0 | 1272.5 | 1276.0 | 1276.0 |
| 45°   | 1145.9 | 1152.9 | 1156.5 | 1160.0 | 1163.5 | 1170.5 | 1167.0 | 1174.1 |
| 47.5° | 1033.4 | 1044.0 | 1047.5 | 1051.0 | 1058.0 | 1061.6 | 1065.1 | 1068.6 |
| 50°   | 931.5  | 938.5  | 938.5  | 945.6  | 956.1  | 956.1  | 963.2  | 966.7  |
| 52.5° | 829.5  | 833.1  | 836.6  | 840.1  | 847.1  | 854.2  | 854.2  | 861.2  |
| 55°   | 731.1  | 734.6  | 734.6  | 738.2  | 741.7  | 755.8  | 759.3  | 759.3  |
| 57.5° | 629.2  | 629.2  | 636.2  | 639.8  | 643.3  | 650.3  | 650.3  | 650.3  |
| 60°   | 530.8  | 534.3  | 534.3  | 537.8  | 541.3  | 548.4  | 551.9  | 548.4  |
| 62.5° | 432.4  | 435.9  | 435.9  | 439.4  | 446.4  | 450.0  | 446.4  | 446.4  |
| 65°   | 341.0  | 344.5  | 344.5  | 348.0  | 355.1  | 355.1  | 351.5  | 355.1  |
| 67.5° | 249.6  | 249.6  | 249.6  | 249.6  | 249.6  | 249.6  | 249.6  | 249.6  |
| 70°   | 158.2  | 154.7  | 151.2  | 154.7  | 154.7  | 154.7  | 151.2  | 158.2  |
| 72.5° | 77.3   | 80.8   | 80.8   | 80.8   | 80.8   | 80.8   | 80.8   | 77.3   |
| 75°   | 35.2   | 35.2   | 31.7   | 31.7   | 31.7   | 35.2   | 35.2   | 31.7   |
| 77.5° | 10.6   | 10.6   | 10.6   | 10.6   | 10.6   | 10.6   | 10.6   | 10.6   |
| 80°   | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    |
| 82.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 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    |

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Scaled Data Report

Cooper Lighting Solutions Photometric Lab

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Peachtree City, GA 30269



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

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(END OF REPORT)