

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: P584778

Luminaire Tested: **HCC8S45D010BZ-HM82555940-81WWWB**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P584778  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-18)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC8S45D010BZ-HM82555940-81WWWB  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" 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: 4975.7 lumens  
Efficiency: N/A  
Efficacy: 113.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.18  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

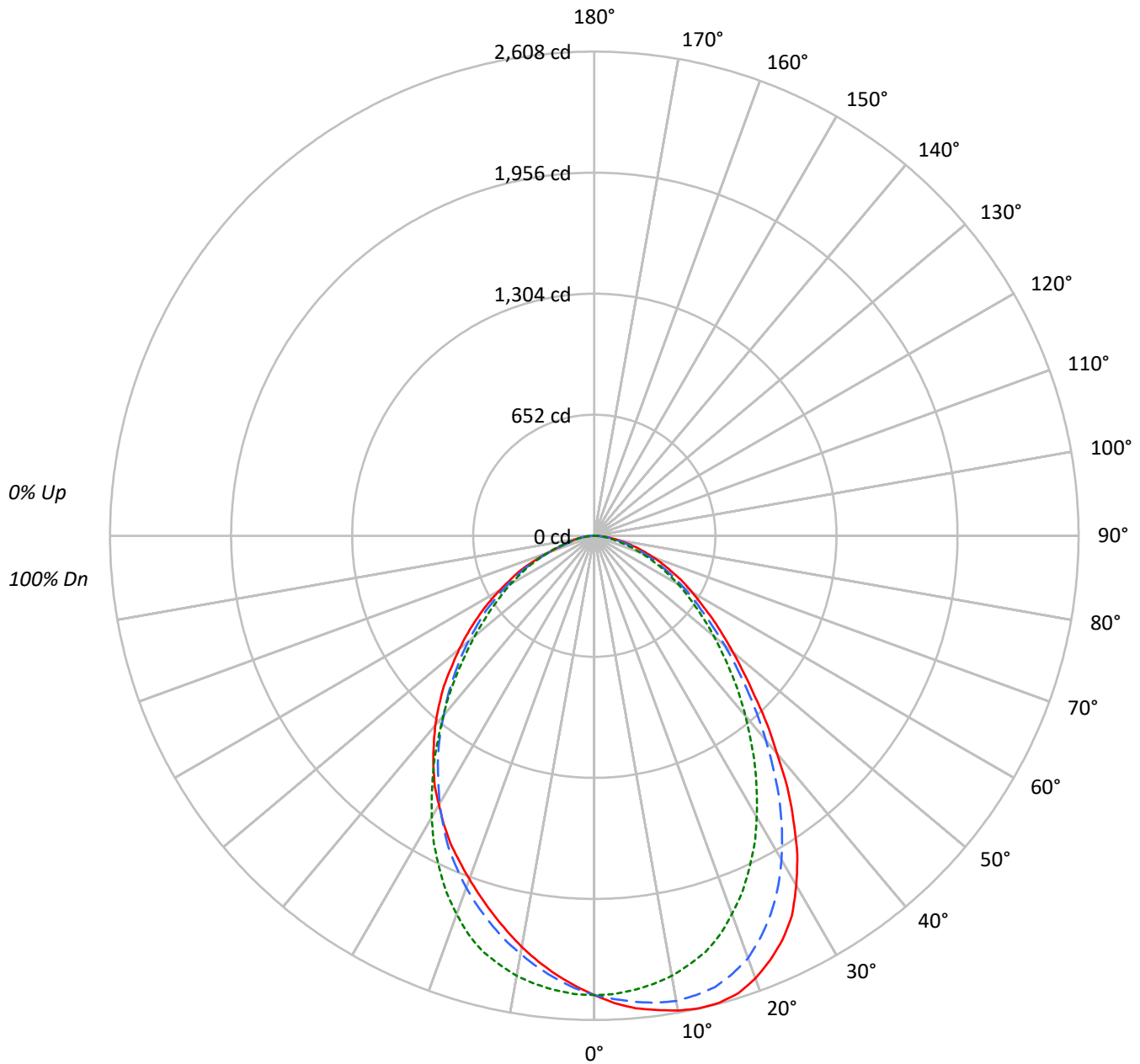
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### 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   | 110 | 106 | 103 | 99  | 108 | 104 | 101 | 98  | 100 | 97  | 95  |  | 96  | 94  | 92  |  | 92  |
| 2   | 102 | 94  | 88  | 83  | 99  | 93  | 87  | 82  | 89  | 85  | 81  |  | 86  | 82  | 79  |  | 83  |
| 3   | 94  | 84  | 77  | 71  | 91  | 83  | 76  | 71  | 80  | 74  | 69  |  | 77  | 72  | 68  |  | 75  |
| 4   | 87  | 76  | 68  | 62  | 84  | 75  | 67  | 61  | 72  | 66  | 61  |  | 70  | 64  | 60  |  | 68  |
| 5   | 80  | 69  | 60  | 54  | 78  | 67  | 60  | 54  | 65  | 59  | 54  |  | 64  | 58  | 53  |  | 62  |
| 6   | 75  | 62  | 54  | 48  | 73  | 61  | 54  | 48  | 60  | 53  | 48  |  | 58  | 52  | 47  |  | 57  |
| 7   | 70  | 57  | 49  | 43  | 68  | 56  | 49  | 43  | 55  | 48  | 43  |  | 53  | 47  | 43  |  | 52  |
| 8   | 65  | 52  | 45  | 39  | 64  | 52  | 44  | 39  | 51  | 44  | 39  |  | 49  | 43  | 39  |  | 48  |
| 9   | 61  | 48  | 41  | 36  | 60  | 48  | 41  | 36  | 47  | 40  | 35  |  | 46  | 40  | 35  |  | 45  |
| 10  | 57  | 45  | 38  | 33  | 56  | 44  | 37  | 33  | 44  | 37  | 32  |  | 43  | 37  | 32  |  | 42  |

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

|     | 0°    | 90°   | 180°  |
|-----|-------|-------|-------|
| 0°  | 76289 | 76289 | 76289 |
| 5°  | 79082 | 76036 | 73423 |
| 10° | 81314 | 75371 | 70421 |
| 15° | 83127 | 74045 | 67312 |
| 20° | 83259 | 71150 | 64577 |
| 25° | 81665 | 67198 | 62291 |
| 30° | 77452 | 62312 | 59559 |
| 35° | 70376 | 56749 | 56884 |
| 40° | 61536 | 50925 | 53610 |
| 45° | 53334 | 45362 | 49959 |
| 50° | 46697 | 40292 | 45517 |
| 55° | 41563 | 35708 | 41187 |
| 60° | 37497 | 32076 | 36196 |
| 65° | 33848 | 28201 | 31543 |
| 70° | 30420 | 23766 | 23450 |
| 75° | 26795 | 18836 | 17585 |
| 80° | 22482 | 15609 | 16852 |
| 85° | 17372 | 13692 | 14931 |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 233.4  | 4.7       |
| 10°-20°   | 657.4  | 13.2      |
| 20°-30°   | 939.4  | 18.9      |
| 30°-40°   | 998.2  | 20.1      |
| 40°-50°   | 859.4  | 17.3      |
| 50°-60°   | 642.6  | 12.9      |
| 60°-70°   | 409.8  | 8.2       |
| 70°-80°   | 186.5  | 3.7       |
| 80°-90°   | 49.0   | 1.0       |
| 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°    | 1830.2 | 36.8      |
| 0°-40°    | 2828.4 | 56.8      |
| 0°-60°    | 4330.4 | 87.0      |
| 0°-90°    | 4975.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4975.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 2474 | 2474 | 2474 | 2474 | 2474 |      |
| 5°  | 2555 | 2520 | 2456 | 2393 | 2372 | 245  |
| 15° | 2604 | 2516 | 2319 | 2161 | 2108 | 733  |
| 25° | 2400 | 2249 | 1975 | 1856 | 1831 | 1099 |
| 35° | 1870 | 1739 | 1508 | 1469 | 1511 | 1164 |
| 45° | 1223 | 1156 | 1040 | 1068 | 1146 | 951  |
| 55° | 773  | 710  | 664  | 720  | 766  | 695  |
| 65° | 464  | 411  | 386  | 404  | 432  | 463  |
| 75° | 225  | 193  | 158  | 144  | 148  | 239  |
| 85° | 49   | 42   | 39   | 42   | 42   | 59   |
| 90° | 0    | 0    | 0    | 0    | 0    |      |

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CATALOG NUMBER: HCC8S45D010BZ-HM82555940-81WWWB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 25°    | 30°    | 35°    | 40°    | 45°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 |
| 2.5°  | 2519.6 | 2512.6 | 2516.1 | 2512.6 | 2516.1 | 2516.1 | 2509.0 | 2509.0 | 2509.0 | 2509.0 | 2498.5 |
| 5°    | 2554.8 | 2551.3 | 2551.3 | 2547.8 | 2544.2 | 2547.8 | 2544.2 | 2540.7 | 2533.7 | 2530.2 | 2519.6 |
| 7.5°  | 2575.8 | 2575.8 | 2575.8 | 2575.8 | 2572.4 | 2568.9 | 2565.4 | 2558.3 | 2551.3 | 2544.2 | 2537.2 |
| 10°   | 2596.9 | 2600.4 | 2596.9 | 2593.4 | 2589.9 | 2582.8 | 2579.3 | 2572.4 | 2561.8 | 2551.3 | 2544.2 |
| 12.5° | 2607.5 | 2607.5 | 2603.9 | 2603.9 | 2596.9 | 2593.4 | 2582.8 | 2572.4 | 2561.8 | 2551.3 | 2533.7 |
| 15°   | 2603.9 | 2603.9 | 2600.4 | 2596.9 | 2586.3 | 2582.8 | 2575.8 | 2565.4 | 2547.8 | 2533.7 | 2516.1 |
| 17.5° | 2582.8 | 2579.3 | 2572.4 | 2572.4 | 2558.3 | 2554.8 | 2547.8 | 2533.7 | 2516.1 | 2495.0 | 2474.0 |
| 20°   | 2537.2 | 2537.2 | 2533.7 | 2530.2 | 2516.1 | 2505.5 | 2498.5 | 2481.0 | 2466.9 | 2442.3 | 2421.2 |
| 22.5° | 2474.0 | 2481.0 | 2474.0 | 2466.9 | 2449.3 | 2445.8 | 2435.3 | 2414.2 | 2393.2 | 2365.0 | 2340.4 |
| 25°   | 2400.2 | 2396.7 | 2393.2 | 2386.1 | 2372.0 | 2365.0 | 2350.9 | 2329.8 | 2308.8 | 2277.1 | 2249.0 |
| 27.5° | 2305.3 | 2291.2 | 2291.2 | 2277.1 | 2266.6 | 2256.0 | 2249.0 | 2228.0 | 2199.8 | 2175.2 | 2140.1 |
| 30°   | 2175.2 | 2178.7 | 2161.1 | 2157.6 | 2140.1 | 2133.1 | 2119.0 | 2097.9 | 2073.3 | 2045.2 | 2017.1 |
| 32.5° | 2034.7 | 2024.1 | 2024.1 | 2010.1 | 1996.0 | 1985.4 | 1982.0 | 1957.4 | 1936.3 | 1908.1 | 1880.1 |
| 35°   | 1869.5 | 1869.5 | 1859.0 | 1855.5 | 1841.4 | 1834.3 | 1823.8 | 1809.8 | 1785.2 | 1760.6 | 1739.4 |
| 37.5° | 1707.9 | 1700.8 | 1697.3 | 1690.3 | 1679.7 | 1669.2 | 1669.2 | 1644.7 | 1641.1 | 1613.0 | 1584.8 |
| 40°   | 1528.7 | 1535.7 | 1528.7 | 1518.1 | 1514.6 | 1507.5 | 1504.0 | 1489.9 | 1479.4 | 1454.9 | 1437.3 |
| 42.5° | 1377.6 | 1370.5 | 1370.5 | 1367.0 | 1352.9 | 1352.9 | 1345.9 | 1338.9 | 1321.3 | 1314.2 | 1293.2 |
| 45°   | 1223.0 | 1229.9 | 1219.5 | 1223.0 | 1208.9 | 1208.9 | 1208.9 | 1194.8 | 1180.7 | 1170.2 | 1156.1 |
| 47.5° | 1089.4 | 1092.9 | 1092.9 | 1082.3 | 1078.8 | 1078.8 | 1071.8 | 1064.7 | 1054.3 | 1040.2 | 1029.7 |
| 50°   | 973.4  | 976.9  | 970.0  | 966.4  | 959.4  | 955.9  | 955.9  | 941.8  | 934.8  | 920.7  | 913.6  |
| 52.5° | 868.0  | 868.0  | 864.5  | 864.5  | 853.9  | 853.9  | 846.9  | 836.3  | 829.3  | 822.3  | 804.7  |
| 55°   | 773.1  | 773.1  | 769.6  | 766.1  | 766.1  | 755.5  | 752.0  | 741.5  | 734.4  | 720.3  | 709.9  |
| 57.5° | 681.7  | 685.3  | 681.7  | 678.2  | 674.7  | 671.2  | 664.2  | 653.6  | 646.6  | 636.0  | 629.1  |
| 60°   | 608.0  | 608.0  | 604.4  | 600.9  | 593.9  | 590.4  | 586.9  | 579.8  | 569.3  | 562.2  | 551.7  |
| 62.5° | 537.7  | 534.2  | 530.7  | 527.1  | 520.1  | 520.1  | 513.1  | 506.0  | 495.5  | 488.4  | 481.4  |
| 65°   | 463.9  | 463.9  | 460.4  | 460.4  | 456.9  | 449.8  | 446.3  | 442.8  | 428.7  | 425.2  | 411.1  |
| 67.5° | 397.1  | 400.6  | 393.5  | 393.5  | 386.5  | 386.5  | 383.0  | 372.5  | 369.0  | 362.0  | 354.9  |
| 70°   | 337.4  | 337.4  | 337.4  | 333.8  | 326.8  | 323.3  | 319.8  | 312.7  | 309.2  | 302.2  | 295.2  |
| 72.5° | 277.6  | 277.6  | 274.1  | 274.1  | 270.6  | 267.1  | 263.6  | 256.5  | 256.5  | 249.5  | 242.5  |
| 75°   | 224.9  | 224.9  | 221.3  | 217.8  | 214.3  | 214.3  | 210.9  | 207.4  | 200.3  | 196.8  | 193.3  |
| 77.5° | 172.2  | 172.2  | 172.2  | 168.7  | 165.2  | 165.2  | 165.2  | 158.1  | 151.1  | 151.1  | 147.6  |
| 80°   | 126.6  | 126.6  | 123.0  | 123.0  | 119.5  | 119.5  | 119.5  | 116.0  | 112.5  | 109.0  | 105.5  |
| 82.5° | 84.3   | 84.3   | 84.3   | 84.3   | 80.8   | 80.8   | 80.8   | 77.3   | 73.8   | 73.8   | 73.8   |
| 85°   | 49.1   | 49.1   | 49.1   | 49.1   | 45.6   | 45.6   | 45.6   | 45.6   | 45.6   | 42.2   | 42.2   |
| 87.5° | 21.1   | 17.6   | 21.1   | 17.6   | 21.1   | 17.6   | 21.1   | 17.6   | 17.6   | 17.6   | 17.6   |
| 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°    | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 |
| 2.5°  | 2502.0 | 2498.5 | 2495.0 | 2491.5 | 2491.5 | 2488.1 | 2481.0 | 2477.5 | 2474.0 | 2470.5 | 2470.5 |
| 5°    | 2516.1 | 2512.6 | 2505.5 | 2498.5 | 2495.0 | 2488.1 | 2481.0 | 2474.0 | 2466.9 | 2456.4 | 2452.9 |
| 7.5°  | 2526.6 | 2516.1 | 2509.0 | 2495.0 | 2491.5 | 2484.5 | 2474.0 | 2463.4 | 2449.3 | 2435.3 | 2424.7 |
| 10°   | 2526.6 | 2512.6 | 2502.0 | 2484.5 | 2477.5 | 2470.5 | 2456.4 | 2438.8 | 2421.2 | 2407.1 | 2389.6 |
| 12.5° | 2519.6 | 2502.0 | 2484.5 | 2466.9 | 2456.4 | 2445.8 | 2424.7 | 2407.1 | 2386.1 | 2365.0 | 2350.9 |
| 15°   | 2495.0 | 2474.0 | 2452.9 | 2431.7 | 2421.2 | 2407.1 | 2386.1 | 2361.5 | 2340.4 | 2319.4 | 2294.7 |
| 17.5° | 2449.3 | 2428.2 | 2403.7 | 2379.1 | 2365.0 | 2354.4 | 2322.8 | 2305.3 | 2273.6 | 2252.5 | 2231.5 |
| 20°   | 2389.6 | 2365.0 | 2333.3 | 2308.8 | 2291.2 | 2280.7 | 2256.0 | 2224.5 | 2199.8 | 2168.2 | 2147.2 |
| 22.5° | 2312.3 | 2280.7 | 2249.0 | 2224.5 | 2206.9 | 2192.8 | 2161.1 | 2129.6 | 2108.5 | 2080.3 | 2055.8 |
| 25°   | 2221.0 | 2189.3 | 2157.6 | 2122.5 | 2104.9 | 2090.9 | 2062.8 | 2034.7 | 2006.5 | 1975.0 | 1953.9 |
| 27.5° | 2112.0 | 2076.8 | 2048.8 | 2017.1 | 1999.5 | 1978.5 | 1946.8 | 1918.7 | 1890.6 | 1869.5 | 1841.4 |
| 30°   | 1992.5 | 1953.9 | 1925.7 | 1894.2 | 1876.6 | 1859.0 | 1827.3 | 1799.3 | 1774.6 | 1750.0 | 1735.9 |
| 32.5° | 1848.4 | 1820.3 | 1792.2 | 1760.6 | 1746.5 | 1735.9 | 1704.4 | 1676.2 | 1648.1 | 1627.1 | 1616.5 |
| 35°   | 1711.4 | 1679.7 | 1655.1 | 1627.1 | 1609.5 | 1598.9 | 1570.8 | 1546.2 | 1532.2 | 1507.5 | 1493.5 |
| 37.5° | 1567.2 | 1542.7 | 1514.6 | 1486.4 | 1476.0 | 1465.4 | 1444.3 | 1419.7 | 1398.6 | 1381.1 | 1374.1 |
| 40°   | 1416.2 | 1395.0 | 1370.5 | 1352.9 | 1342.4 | 1331.8 | 1314.2 | 1296.8 | 1282.7 | 1265.1 | 1258.0 |
| 42.5° | 1272.1 | 1258.0 | 1236.9 | 1215.9 | 1205.4 | 1201.9 | 1180.7 | 1166.7 | 1159.6 | 1152.6 | 1145.6 |
| 45°   | 1142.0 | 1121.0 | 1107.0 | 1092.9 | 1082.3 | 1075.3 | 1064.7 | 1054.3 | 1047.3 | 1040.2 | 1033.2 |
| 47.5° | 1015.6 | 998.0  | 983.9  | 973.4  | 962.9  | 959.4  | 952.4  | 941.8  | 934.8  | 934.8  | 934.8  |
| 50°   | 899.6  | 885.6  | 871.5  | 864.5  | 861.0  | 853.9  | 846.9  | 843.4  | 839.9  | 839.9  | 839.9  |
| 52.5° | 797.8  | 783.7  | 773.1  | 766.1  | 766.1  | 759.0  | 752.0  | 748.5  | 748.5  | 748.5  | 748.5  |
| 55°   | 702.9  | 692.3  | 685.3  | 678.2  | 671.2  | 667.7  | 667.7  | 667.7  | 664.2  | 664.2  | 667.7  |
| 57.5° | 618.5  | 611.5  | 600.9  | 593.9  | 590.4  | 590.4  | 586.9  | 583.3  | 586.9  | 590.4  | 593.9  |
| 60°   | 541.2  | 534.2  | 530.7  | 520.1  | 520.1  | 520.1  | 516.6  | 516.6  | 516.6  | 520.1  | 523.6  |
| 62.5° | 470.8  | 467.3  | 460.4  | 456.9  | 453.4  | 453.4  | 449.8  | 449.8  | 449.8  | 449.8  | 453.4  |
| 65°   | 407.6  | 400.6  | 393.5  | 393.5  | 393.5  | 390.0  | 390.0  | 383.0  | 386.5  | 386.5  | 383.0  |
| 67.5° | 347.9  | 340.9  | 337.4  | 333.8  | 330.3  | 330.3  | 326.8  | 323.3  | 319.8  | 319.8  | 319.8  |
| 70°   | 291.7  | 284.7  | 284.7  | 277.6  | 277.6  | 274.1  | 270.6  | 270.6  | 267.1  | 263.6  | 260.1  |
| 72.5° | 235.4  | 231.9  | 228.4  | 224.9  | 224.9  | 224.9  | 221.3  | 217.8  | 214.3  | 210.9  | 203.9  |
| 75°   | 186.3  | 186.3  | 179.2  | 175.7  | 175.7  | 172.2  | 168.7  | 165.2  | 161.6  | 158.1  | 154.6  |
| 77.5° | 144.0  | 140.5  | 133.5  | 130.0  | 130.0  | 130.0  | 126.6  | 123.0  | 119.5  | 116.0  | 112.5  |
| 80°   | 105.5  | 101.9  | 98.4   | 94.9   | 94.9   | 94.9   | 91.4   | 91.4   | 87.9   | 87.9   | 87.9   |
| 82.5° | 70.3   | 70.3   | 66.7   | 66.7   | 66.7   | 66.7   | 63.2   | 63.2   | 63.2   | 63.2   | 63.2   |
| 85°   | 42.2   | 42.2   | 38.7   | 38.7   | 38.7   | 38.7   | 38.7   | 38.7   | 38.7   | 38.7   | 38.7   |
| 87.5° | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   |
| 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°    | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 |
| 2.5°  | 2463.4 | 2463.4 | 2456.4 | 2452.9 | 2449.3 | 2452.9 | 2445.8 | 2442.3 | 2438.8 | 2438.8 | 2435.3 |
| 5°    | 2442.3 | 2438.8 | 2424.7 | 2421.2 | 2417.7 | 2414.2 | 2407.1 | 2400.2 | 2393.2 | 2389.6 | 2386.1 |
| 7.5°  | 2414.2 | 2403.7 | 2389.6 | 2386.1 | 2382.6 | 2372.0 | 2361.5 | 2354.4 | 2343.9 | 2340.4 | 2333.3 |
| 10°   | 2375.6 | 2361.5 | 2350.9 | 2340.4 | 2333.3 | 2322.8 | 2312.3 | 2301.8 | 2287.7 | 2284.2 | 2273.6 |
| 12.5° | 2329.8 | 2312.3 | 2291.2 | 2287.7 | 2277.1 | 2263.1 | 2249.0 | 2238.4 | 2228.0 | 2221.0 | 2210.4 |
| 15°   | 2273.6 | 2256.0 | 2235.0 | 2224.5 | 2213.9 | 2203.4 | 2185.8 | 2171.7 | 2161.1 | 2150.7 | 2140.1 |
| 17.5° | 2206.9 | 2185.8 | 2168.2 | 2157.6 | 2150.7 | 2133.1 | 2119.0 | 2101.4 | 2090.9 | 2080.3 | 2069.8 |
| 20°   | 2126.1 | 2108.5 | 2083.8 | 2073.3 | 2069.8 | 2055.8 | 2038.2 | 2031.2 | 2017.1 | 2006.5 | 1999.5 |
| 22.5° | 2034.7 | 2017.1 | 1996.0 | 1988.9 | 1975.0 | 1967.9 | 1950.3 | 1943.3 | 1936.3 | 1925.7 | 1922.2 |
| 25°   | 1932.8 | 1915.2 | 1897.7 | 1894.2 | 1883.6 | 1876.6 | 1866.0 | 1855.5 | 1855.5 | 1844.9 | 1844.9 |
| 27.5° | 1827.3 | 1809.8 | 1795.7 | 1788.7 | 1785.2 | 1778.2 | 1767.6 | 1764.1 | 1760.6 | 1757.0 | 1757.0 |
| 30°   | 1714.9 | 1693.8 | 1686.8 | 1683.3 | 1679.7 | 1672.7 | 1669.2 | 1662.1 | 1665.7 | 1669.2 | 1665.7 |
| 32.5° | 1595.4 | 1588.4 | 1574.3 | 1567.2 | 1570.8 | 1567.2 | 1560.3 | 1567.2 | 1563.7 | 1570.8 | 1574.3 |
| 35°   | 1479.4 | 1472.5 | 1465.4 | 1465.4 | 1458.4 | 1458.4 | 1458.4 | 1461.9 | 1468.9 | 1472.5 | 1479.4 |
| 37.5° | 1367.0 | 1356.5 | 1352.9 | 1349.4 | 1352.9 | 1352.9 | 1352.9 | 1360.0 | 1367.0 | 1374.1 | 1384.6 |
| 40°   | 1247.5 | 1240.4 | 1240.4 | 1240.4 | 1240.4 | 1251.0 | 1247.5 | 1254.5 | 1261.6 | 1272.1 | 1282.7 |
| 42.5° | 1135.1 | 1135.1 | 1138.6 | 1138.6 | 1138.6 | 1138.6 | 1145.6 | 1156.1 | 1166.7 | 1177.2 | 1187.8 |
| 45°   | 1029.7 | 1029.7 | 1029.7 | 1036.7 | 1036.7 | 1040.2 | 1054.3 | 1061.2 | 1068.3 | 1078.8 | 1089.4 |
| 47.5° | 931.2  | 931.2  | 934.8  | 938.3  | 941.8  | 948.8  | 955.9  | 966.4  | 976.9  | 983.9  | 994.5  |
| 50°   | 839.9  | 843.4  | 850.4  | 857.5  | 857.5  | 861.0  | 871.5  | 878.6  | 885.6  | 896.1  | 899.6  |
| 52.5° | 752.0  | 759.0  | 766.1  | 769.6  | 773.1  | 780.2  | 783.7  | 794.2  | 797.8  | 808.2  | 811.7  |
| 55°   | 671.2  | 674.7  | 685.3  | 688.8  | 688.8  | 695.8  | 702.9  | 709.9  | 720.3  | 720.3  | 727.4  |
| 57.5° | 597.4  | 600.9  | 608.0  | 611.5  | 608.0  | 618.5  | 622.0  | 629.1  | 632.6  | 639.5  | 643.0  |
| 60°   | 523.6  | 530.7  | 534.2  | 534.2  | 537.7  | 541.2  | 548.3  | 548.3  | 555.2  | 562.2  | 562.2  |
| 62.5° | 453.4  | 456.9  | 460.4  | 463.9  | 467.3  | 463.9  | 474.4  | 474.4  | 481.4  | 484.9  | 492.0  |
| 65°   | 386.5  | 390.0  | 390.0  | 393.5  | 393.5  | 397.1  | 397.1  | 400.6  | 404.1  | 411.1  | 414.7  |
| 67.5° | 319.8  | 319.8  | 319.8  | 323.3  | 319.8  | 323.3  | 323.3  | 326.8  | 326.8  | 333.8  | 337.4  |
| 70°   | 260.1  | 256.5  | 253.0  | 253.0  | 253.0  | 253.0  | 249.5  | 253.0  | 253.0  | 256.5  | 256.5  |
| 72.5° | 200.3  | 196.8  | 193.3  | 189.8  | 189.8  | 186.3  | 182.8  | 186.3  | 186.3  | 189.8  | 189.8  |
| 75°   | 151.1  | 144.0  | 144.0  | 144.0  | 140.5  | 140.5  | 140.5  | 144.0  | 144.0  | 144.0  | 147.6  |
| 77.5° | 112.5  | 112.5  | 109.0  | 109.0  | 109.0  | 112.5  | 112.5  | 116.0  | 116.0  | 116.0  | 116.0  |
| 80°   | 84.3   | 87.9   | 87.9   | 87.9   | 87.9   | 91.4   | 91.4   | 91.4   | 91.4   | 94.9   | 94.9   |
| 82.5° | 63.2   | 63.2   | 63.2   | 63.2   | 66.7   | 66.7   | 66.7   | 66.7   | 66.7   | 66.7   | 66.7   |
| 85°   | 38.7   | 42.2   | 42.2   | 38.7   | 42.2   | 42.2   | 42.2   | 42.2   | 42.2   | 42.2   | 42.2   |
| 87.5° | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   |
| 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: P584778

CATALOG NUMBER: HCC8S45D010BZ-HM82555940-81WWWB

**CANDELA DISTRIBUTION (continued):**

|       | 150°   | 155°   | 157.5° | 160°   | 165°   | 170°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 | 2474.0 |
| 2.5°  | 2431.7 | 2431.7 | 2431.7 | 2431.7 | 2428.2 | 2428.2 | 2428.2 | 2424.7 |
| 5°    | 2379.1 | 2379.1 | 2379.1 | 2372.0 | 2375.6 | 2375.6 | 2368.5 | 2372.0 |
| 7.5°  | 2326.3 | 2322.8 | 2319.4 | 2319.4 | 2315.9 | 2312.3 | 2308.8 | 2312.3 |
| 10°   | 2266.6 | 2256.0 | 2256.0 | 2252.5 | 2252.5 | 2245.5 | 2245.5 | 2249.0 |
| 12.5° | 2199.8 | 2192.8 | 2192.8 | 2189.3 | 2185.8 | 2182.2 | 2178.7 | 2178.7 |
| 15°   | 2133.1 | 2126.1 | 2122.5 | 2119.0 | 2115.5 | 2108.5 | 2112.0 | 2108.5 |
| 17.5° | 2066.4 | 2055.8 | 2055.8 | 2052.3 | 2048.8 | 2041.7 | 2041.7 | 2038.2 |
| 20°   | 1988.9 | 1985.4 | 1978.5 | 1982.0 | 1978.5 | 1971.5 | 1967.9 | 1967.9 |
| 22.5° | 1911.6 | 1911.6 | 1908.1 | 1908.1 | 1904.6 | 1901.1 | 1897.7 | 1897.7 |
| 25°   | 1837.9 | 1834.3 | 1837.9 | 1837.9 | 1827.3 | 1827.3 | 1827.3 | 1830.8 |
| 27.5° | 1753.5 | 1757.0 | 1753.5 | 1753.5 | 1753.5 | 1753.5 | 1757.0 | 1753.5 |
| 30°   | 1669.2 | 1669.2 | 1669.2 | 1672.7 | 1679.7 | 1676.2 | 1676.2 | 1672.7 |
| 32.5° | 1577.8 | 1581.3 | 1581.3 | 1584.8 | 1588.4 | 1595.4 | 1595.4 | 1598.9 |
| 35°   | 1486.4 | 1493.5 | 1497.0 | 1493.5 | 1504.0 | 1504.0 | 1511.1 | 1511.1 |
| 37.5° | 1391.6 | 1395.0 | 1402.1 | 1405.6 | 1412.6 | 1416.2 | 1419.7 | 1419.7 |
| 40°   | 1289.7 | 1303.8 | 1307.3 | 1310.7 | 1321.3 | 1321.3 | 1324.8 | 1331.8 |
| 42.5° | 1194.8 | 1208.9 | 1212.4 | 1215.9 | 1223.0 | 1233.4 | 1229.9 | 1236.9 |
| 45°   | 1103.4 | 1114.0 | 1117.5 | 1121.0 | 1131.6 | 1135.1 | 1135.1 | 1145.6 |
| 47.5° | 1005.0 | 1012.1 | 1015.6 | 1022.6 | 1029.7 | 1036.7 | 1043.7 | 1040.2 |
| 50°   | 906.6  | 917.2  | 924.2  | 927.7  | 938.3  | 941.8  | 945.3  | 948.8  |
| 52.5° | 818.8  | 825.8  | 829.3  | 832.8  | 843.4  | 846.9  | 850.4  | 857.5  |
| 55°   | 734.4  | 737.9  | 745.0  | 741.5  | 752.0  | 755.5  | 759.0  | 766.1  |
| 57.5° | 650.1  | 653.6  | 657.1  | 657.1  | 664.2  | 671.2  | 674.7  | 678.2  |
| 60°   | 569.3  | 576.3  | 579.8  | 579.8  | 579.8  | 586.9  | 586.9  | 586.9  |
| 62.5° | 495.5  | 495.5  | 499.0  | 499.0  | 506.0  | 506.0  | 506.0  | 506.0  |
| 65°   | 418.2  | 421.7  | 425.2  | 425.2  | 432.3  | 428.7  | 435.8  | 432.3  |
| 67.5° | 337.4  | 337.4  | 344.4  | 344.4  | 340.9  | 344.4  | 344.4  | 344.4  |
| 70°   | 256.5  | 256.5  | 260.1  | 260.1  | 260.1  | 260.1  | 260.1  | 260.1  |
| 72.5° | 189.8  | 189.8  | 189.8  | 193.3  | 189.8  | 189.8  | 193.3  | 189.8  |
| 75°   | 147.6  | 147.6  | 147.6  | 147.6  | 147.6  | 147.6  | 147.6  | 147.6  |
| 77.5° | 116.0  | 116.0  | 119.5  | 119.5  | 119.5  | 119.5  | 119.5  | 119.5  |
| 80°   | 94.9   | 94.9   | 94.9   | 94.9   | 98.4   | 94.9   | 94.9   | 94.9   |
| 82.5° | 70.3   | 66.7   | 70.3   | 66.7   | 70.3   | 70.3   | 70.3   | 70.3   |
| 85°   | 42.2   | 42.2   | 42.2   | 42.2   | 42.2   | 42.2   | 42.2   | 42.2   |
| 87.5° | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   | 17.6   |
| 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

1121 Highway 74 South

Peachtree City, GA 30269



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Peachtree City, GA 30269

Scaled Data Report



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1121 Highway 74 South

Peachtree City, GA 30269



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

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