

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: P584352

Luminaire Tested: **HC830D010-HM82555935-81WWW**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584352
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC830D010-HM82555935-81WWW
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2916.9 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.09 / 1.04 / 1.13
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

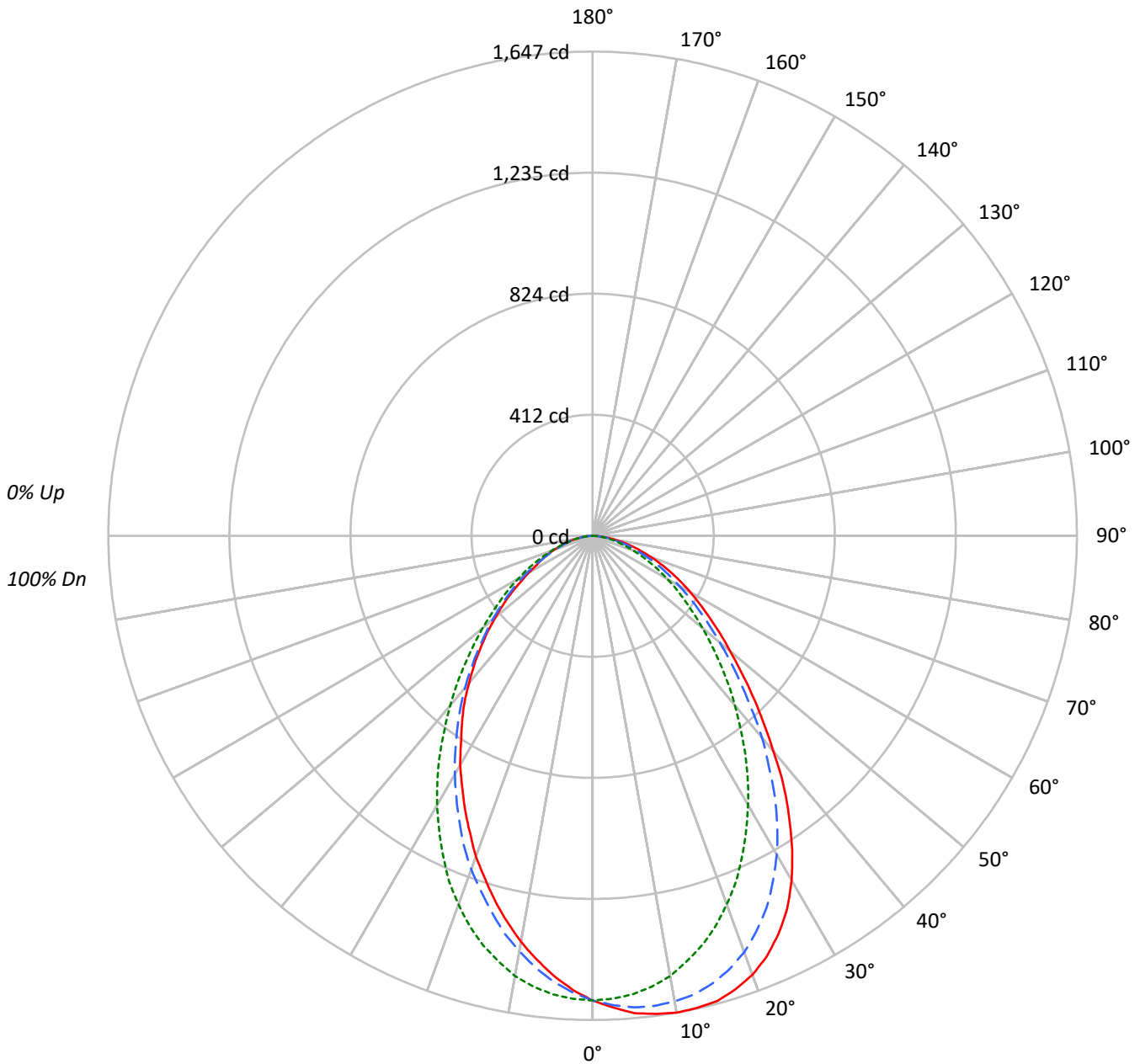
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P584352

CATALOG NUMBER: HC830D010-HM82555935-81WWW

Luminous Intensity Polar Plot





TEST NUMBER: P584352

CATALOG NUMBER: HC830D010-HM82555935-81WWW

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 | 110 | 106 | 103 | 99 | 108 | 104 | 101 | 98 | 100 | 97 | 95 | 96 | 94 | 92 | 93 | 91 | 89 | 87 | | | | | | | | | | | | | | | | | | | |
| 2 | 102 | 95 | 89 | 84 | 99 | 93 | 88 | 83 | 90 | 85 | 81 | 86 | 83 | 79 | 83 | 80 | 78 | 76 | | | | | | | | | | | | | | | | | | | |
| 3 | 94 | 85 | 78 | 72 | 92 | 83 | 77 | 71 | 81 | 75 | 70 | 78 | 73 | 69 | 75 | 71 | 68 | 66 | | | | | | | | | | | | | | | | | | | |
| 4 | 87 | 76 | 69 | 63 | 85 | 75 | 68 | 62 | 73 | 67 | 62 | 71 | 65 | 61 | 68 | 64 | 60 | 58 | | | | | | | | | | | | | | | | | | | |
| 5 | 81 | 69 | 61 | 55 | 79 | 68 | 61 | 55 | 66 | 60 | 54 | 64 | 59 | 54 | 63 | 57 | 53 | 51 | | | | | | | | | | | | | | | | | | | |
| 6 | 75 | 63 | 55 | 49 | 73 | 62 | 55 | 49 | 61 | 54 | 49 | 59 | 53 | 48 | 57 | 52 | 48 | 46 | | | | | | | | | | | | | | | | | | | |
| 7 | 70 | 58 | 50 | 44 | 69 | 57 | 50 | 44 | 56 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 43 | 41 | | | | | | | | | | | | | | | | | | | |
| 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 | 39 | 34 | 57 | 45 | 38 | 34 | 44 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 32 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 48737 | 48737 | 48737 |
| 5° | 50449 | 48456 | 46533 |
| 10° | 51571 | 47610 | 43915 |
| 15° | 52304 | 46006 | 41010 |
| 20° | 52147 | 43769 | 38072 |
| 25° | 50856 | 40931 | 34950 |
| 30° | 48183 | 37647 | 32071 |
| 35° | 43837 | 34064 | 29144 |
| 40° | 38499 | 30303 | 26330 |
| 45° | 33575 | 26650 | 23475 |
| 50° | 29215 | 23353 | 20676 |
| 55° | 26053 | 20521 | 17989 |
| 60° | 23670 | 17990 | 15338 |
| 65° | 21284 | 15651 | 13922 |
| 70° | 18951 | 13335 | 12568 |
| 75° | 16608 | 11247 | 10735 |
| 80° | 14082 | 9145 | 9518 |
| 85° | 10650 | 6828 | 7571 |



TEST NUMBER: P584352

CATALOG NUMBER: HC830D010-HM82555935-81WWW

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 148.0 | 5.1 |
| 10°-20° | 407.9 | 14.0 |
| 20°-30° | 566.2 | 19.4 |
| 30°-40° | 585.4 | 20.1 |
| 40°-50° | 490.1 | 16.8 |
| 50°-60° | 355.8 | 12.2 |
| 60°-70° | 224.5 | 7.7 |
| 70°-80° | 111.2 | 3.8 |
| 80°-90° | 27.6 | 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° | 1122.1 | 38.5 |
| 0°-40° | 1707.5 | 58.5 |
| 0°-60° | 2553.4 | 87.5 |
| 0°-90° | 2916.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2916.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 1580 | 1580 | 1580 | 1580 | 1580 | |
| 5° | 1630 | 1610 | 1565 | 1523 | 1503 | 156 |
| 15° | 1638 | 1576 | 1441 | 1325 | 1285 | 461 |
| 25° | 1495 | 1398 | 1203 | 1072 | 1027 | 685 |
| 35° | 1164 | 1079 | 905 | 802 | 774 | 725 |
| 45° | 770 | 714 | 611 | 551 | 538 | 595 |
| 55° | 485 | 442 | 382 | 350 | 335 | 437 |
| 65° | 292 | 255 | 214 | 189 | 191 | 291 |
| 75° | 139 | 116 | 94 | 90 | 90 | 150 |
| 85° | 30 | 24 | 19 | 21 | 21 | 36 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P584352

CATALOG NUMBER: HC830D010-HM82555935-81WWW

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 |
| 2.5° | 1606.2 | 1606.2 | 1608.4 | 1606.2 | 1606.2 | 1606.2 | 1604.1 | 1604.1 | 1601.9 | 1601.9 | 1597.7 |
| 5° | 1629.8 | 1625.5 | 1629.8 | 1625.5 | 1625.5 | 1625.5 | 1623.3 | 1619.1 | 1616.9 | 1612.6 | 1610.5 |
| 7.5° | 1640.6 | 1638.4 | 1638.4 | 1636.3 | 1636.3 | 1634.0 | 1631.9 | 1629.8 | 1621.2 | 1619.1 | 1612.6 |
| 10° | 1647.0 | 1644.9 | 1644.9 | 1642.7 | 1638.4 | 1638.4 | 1634.0 | 1631.9 | 1621.2 | 1616.9 | 1608.4 |
| 12.5° | 1644.9 | 1644.9 | 1644.9 | 1642.7 | 1636.3 | 1634.0 | 1629.8 | 1623.3 | 1614.8 | 1606.2 | 1597.7 |
| 15° | 1638.4 | 1638.4 | 1634.0 | 1631.9 | 1625.5 | 1621.2 | 1619.1 | 1608.4 | 1599.8 | 1589.1 | 1576.3 |
| 17.5° | 1616.9 | 1616.9 | 1614.8 | 1610.5 | 1604.1 | 1599.8 | 1595.5 | 1584.8 | 1576.3 | 1559.0 | 1546.2 |
| 20° | 1589.1 | 1587.0 | 1584.8 | 1578.4 | 1571.9 | 1569.7 | 1563.3 | 1548.3 | 1537.6 | 1524.8 | 1507.5 |
| 22.5° | 1548.3 | 1546.2 | 1544.0 | 1539.8 | 1529.1 | 1524.8 | 1520.5 | 1509.7 | 1490.4 | 1477.6 | 1456.0 |
| 25° | 1494.7 | 1494.7 | 1490.4 | 1484.0 | 1473.3 | 1469.0 | 1462.6 | 1451.8 | 1434.6 | 1415.4 | 1398.3 |
| 27.5° | 1432.5 | 1430.4 | 1423.9 | 1419.7 | 1411.1 | 1404.7 | 1393.9 | 1381.0 | 1363.9 | 1348.9 | 1327.4 |
| 30° | 1353.2 | 1353.2 | 1348.9 | 1342.5 | 1331.7 | 1327.4 | 1318.8 | 1303.9 | 1286.7 | 1267.4 | 1252.4 |
| 32.5° | 1263.1 | 1263.1 | 1256.7 | 1252.4 | 1246.0 | 1235.3 | 1233.1 | 1215.9 | 1200.9 | 1185.9 | 1168.8 |
| 35° | 1164.5 | 1166.6 | 1162.4 | 1153.7 | 1143.0 | 1143.0 | 1138.7 | 1123.7 | 1106.6 | 1091.5 | 1078.7 |
| 37.5° | 1065.8 | 1059.4 | 1057.3 | 1053.0 | 1046.6 | 1037.9 | 1033.6 | 1027.2 | 1012.2 | 1001.5 | 982.2 |
| 40° | 956.4 | 958.6 | 954.3 | 950.0 | 947.9 | 941.5 | 939.3 | 928.6 | 917.8 | 904.9 | 896.4 |
| 42.5° | 857.7 | 857.7 | 857.7 | 853.5 | 849.2 | 842.8 | 840.6 | 834.2 | 821.4 | 812.8 | 799.8 |
| 45° | 769.9 | 763.5 | 763.5 | 761.3 | 759.2 | 754.9 | 748.5 | 744.2 | 735.5 | 729.1 | 714.1 |
| 47.5° | 684.2 | 686.3 | 684.2 | 681.9 | 675.5 | 673.3 | 671.2 | 662.6 | 654.1 | 647.6 | 636.9 |
| 50° | 609.0 | 613.3 | 609.0 | 609.0 | 604.7 | 602.6 | 598.3 | 591.9 | 585.5 | 574.8 | 563.9 |
| 52.5° | 546.8 | 546.8 | 544.7 | 542.5 | 536.1 | 531.8 | 529.7 | 527.6 | 516.9 | 508.3 | 499.6 |
| 55° | 484.6 | 486.8 | 486.8 | 480.4 | 478.2 | 473.9 | 471.8 | 465.4 | 461.1 | 448.3 | 441.7 |
| 57.5° | 431.0 | 428.9 | 431.0 | 426.7 | 422.5 | 418.2 | 416.0 | 411.8 | 405.3 | 396.8 | 388.2 |
| 60° | 383.8 | 379.5 | 379.5 | 377.4 | 373.1 | 371.0 | 366.7 | 360.3 | 353.8 | 345.3 | 338.9 |
| 62.5° | 336.7 | 334.6 | 332.4 | 330.3 | 325.9 | 323.8 | 321.6 | 315.2 | 308.8 | 302.4 | 295.9 |
| 65° | 291.7 | 291.7 | 289.5 | 285.2 | 283.1 | 281.0 | 278.8 | 274.5 | 265.9 | 261.6 | 255.2 |
| 67.5° | 250.9 | 248.7 | 248.7 | 244.5 | 240.2 | 238.0 | 238.0 | 233.8 | 227.3 | 220.9 | 216.6 |
| 70° | 210.2 | 212.4 | 210.2 | 208.0 | 203.7 | 203.7 | 199.4 | 197.3 | 188.7 | 186.6 | 180.1 |
| 72.5° | 173.7 | 173.7 | 171.6 | 171.6 | 167.3 | 165.2 | 165.2 | 160.9 | 156.6 | 152.3 | 147.9 |
| 75° | 139.4 | 139.4 | 139.4 | 137.2 | 135.1 | 130.8 | 130.8 | 128.6 | 124.4 | 120.1 | 115.8 |
| 77.5° | 109.4 | 107.2 | 107.2 | 105.1 | 103.0 | 100.8 | 100.8 | 98.7 | 94.4 | 92.3 | 87.9 |
| 80° | 79.3 | 77.2 | 77.2 | 77.2 | 72.9 | 75.0 | 72.9 | 70.7 | 68.6 | 66.5 | 64.3 |
| 82.5° | 51.5 | 53.6 | 53.6 | 51.5 | 49.3 | 49.3 | 49.3 | 47.2 | 47.2 | 45.1 | 42.9 |
| 85° | 30.1 | 30.1 | 30.1 | 30.1 | 27.8 | 27.8 | 27.8 | 25.7 | 25.7 | 25.7 | 23.5 |
| 87.5° | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 10.7 | 10.7 | 10.7 | 10.7 | 10.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P584352

CATALOG NUMBER: HC830D010-HM82555935-81WWW

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 |
| 2.5° | 1597.7 | 1593.4 | 1591.2 | 1589.1 | 1589.1 | 1587.0 | 1584.8 | 1580.5 | 1580.5 | 1576.3 | 1574.0 |
| 5° | 1606.2 | 1599.8 | 1595.5 | 1591.2 | 1589.1 | 1584.8 | 1580.5 | 1574.0 | 1571.9 | 1565.4 | 1559.0 |
| 7.5° | 1608.4 | 1597.7 | 1593.4 | 1584.8 | 1580.5 | 1576.3 | 1567.6 | 1561.2 | 1552.6 | 1546.2 | 1537.6 |
| 10° | 1599.8 | 1591.2 | 1580.5 | 1569.7 | 1567.6 | 1561.2 | 1548.3 | 1539.8 | 1529.1 | 1520.5 | 1507.5 |
| 12.5° | 1587.0 | 1574.0 | 1563.3 | 1550.5 | 1544.0 | 1537.6 | 1524.8 | 1511.8 | 1496.8 | 1481.9 | 1469.0 |
| 15° | 1565.4 | 1550.5 | 1535.5 | 1520.5 | 1511.8 | 1505.4 | 1490.4 | 1475.4 | 1460.4 | 1441.1 | 1428.2 |
| 17.5° | 1533.3 | 1516.2 | 1501.1 | 1481.9 | 1473.3 | 1466.9 | 1447.5 | 1430.4 | 1411.1 | 1391.7 | 1378.9 |
| 20° | 1492.6 | 1471.1 | 1453.9 | 1432.5 | 1426.1 | 1415.4 | 1396.0 | 1376.7 | 1355.3 | 1333.8 | 1318.8 |
| 22.5° | 1438.9 | 1417.5 | 1398.3 | 1376.7 | 1366.0 | 1355.3 | 1336.0 | 1312.4 | 1291.0 | 1273.8 | 1258.8 |
| 25° | 1376.7 | 1357.5 | 1333.8 | 1314.6 | 1301.7 | 1288.9 | 1267.4 | 1248.1 | 1228.8 | 1203.0 | 1188.0 |
| 27.5° | 1308.1 | 1284.6 | 1267.4 | 1241.7 | 1228.8 | 1220.3 | 1196.6 | 1170.9 | 1153.7 | 1130.1 | 1113.0 |
| 30° | 1231.0 | 1209.5 | 1190.2 | 1164.5 | 1151.5 | 1143.0 | 1121.6 | 1097.9 | 1080.8 | 1057.3 | 1040.0 |
| 32.5° | 1149.4 | 1125.9 | 1102.3 | 1085.1 | 1070.1 | 1061.5 | 1037.9 | 1022.9 | 1001.5 | 982.2 | 962.9 |
| 35° | 1061.5 | 1037.9 | 1020.8 | 997.2 | 988.7 | 980.0 | 960.7 | 941.5 | 922.2 | 904.9 | 890.0 |
| 37.5° | 967.1 | 950.0 | 930.7 | 913.5 | 907.1 | 898.5 | 875.0 | 857.7 | 842.8 | 825.6 | 812.8 |
| 40° | 875.0 | 859.9 | 847.0 | 829.9 | 819.2 | 812.8 | 795.6 | 780.6 | 763.5 | 752.8 | 739.8 |
| 42.5° | 791.3 | 774.2 | 761.3 | 748.5 | 737.7 | 731.2 | 716.3 | 705.6 | 692.7 | 681.9 | 666.9 |
| 45° | 703.4 | 694.9 | 679.8 | 669.1 | 662.6 | 654.1 | 643.4 | 630.5 | 619.7 | 611.1 | 600.4 |
| 47.5° | 626.2 | 617.6 | 606.9 | 594.0 | 589.7 | 583.3 | 572.6 | 563.9 | 555.4 | 546.8 | 536.1 |
| 50° | 555.4 | 544.7 | 536.1 | 527.6 | 523.3 | 516.9 | 506.2 | 501.8 | 495.3 | 486.8 | 480.4 |
| 52.5° | 491.1 | 482.5 | 473.9 | 463.2 | 461.1 | 456.8 | 450.4 | 441.7 | 435.3 | 431.0 | 426.7 |
| 55° | 433.2 | 424.6 | 418.2 | 409.6 | 407.5 | 403.2 | 394.6 | 390.3 | 385.9 | 381.7 | 377.4 |
| 57.5° | 381.7 | 373.1 | 364.5 | 360.3 | 356.0 | 351.7 | 349.6 | 343.1 | 338.9 | 336.7 | 332.4 |
| 60° | 334.6 | 325.9 | 319.5 | 313.1 | 310.9 | 308.8 | 304.5 | 300.2 | 295.9 | 291.7 | 289.5 |
| 62.5° | 289.5 | 281.0 | 276.7 | 272.4 | 268.1 | 268.1 | 263.7 | 259.4 | 255.2 | 253.0 | 248.7 |
| 65° | 248.7 | 244.5 | 238.0 | 231.6 | 229.5 | 229.5 | 223.1 | 220.9 | 218.8 | 214.5 | 210.2 |
| 67.5° | 210.2 | 205.8 | 199.4 | 197.3 | 195.1 | 193.0 | 190.8 | 186.6 | 182.3 | 180.1 | 175.9 |
| 70° | 175.9 | 171.6 | 167.3 | 165.2 | 163.0 | 160.9 | 156.6 | 154.5 | 150.2 | 147.9 | 145.8 |
| 72.5° | 141.5 | 139.4 | 135.1 | 132.9 | 130.8 | 128.6 | 126.5 | 124.4 | 120.1 | 117.9 | 115.8 |
| 75° | 113.7 | 111.5 | 107.2 | 105.1 | 103.0 | 103.0 | 100.8 | 96.5 | 94.4 | 94.4 | 92.3 |
| 77.5° | 85.7 | 83.6 | 81.4 | 79.3 | 77.2 | 77.2 | 75.0 | 72.9 | 70.7 | 70.7 | 68.6 |
| 80° | 62.2 | 60.0 | 57.9 | 57.9 | 57.9 | 55.8 | 53.6 | 53.6 | 51.5 | 51.5 | 49.3 |
| 82.5° | 40.8 | 40.8 | 38.6 | 38.6 | 38.6 | 36.5 | 36.5 | 34.4 | 34.4 | 34.4 | 34.4 |
| 85° | 23.5 | 23.5 | 23.5 | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 | 19.3 | 21.4 |
| 87.5° | 10.7 | 10.7 | 10.7 | 10.7 | 10.7 | 10.7 | 10.7 | 10.7 | 8.6 | 8.6 | 8.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P584352

CATALOG NUMBER: HC830D010-HM82555935-81WWW

CANDELA DISTRIBUTION (continued):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 |
| 2.5° | 1571.9 | 1569.7 | 1565.4 | 1565.4 | 1561.2 | 1561.2 | 1559.0 | 1556.9 | 1554.7 | 1552.6 | 1550.5 |
| 5° | 1556.9 | 1548.3 | 1544.0 | 1541.9 | 1537.6 | 1535.5 | 1529.1 | 1524.8 | 1522.6 | 1518.4 | 1514.0 |
| 7.5° | 1529.1 | 1520.5 | 1511.8 | 1509.7 | 1507.5 | 1499.0 | 1492.6 | 1486.1 | 1481.9 | 1477.6 | 1473.3 |
| 10° | 1496.8 | 1488.3 | 1477.6 | 1473.3 | 1469.0 | 1458.3 | 1449.6 | 1443.2 | 1434.6 | 1426.1 | 1423.9 |
| 12.5° | 1458.3 | 1445.3 | 1432.5 | 1428.2 | 1421.8 | 1411.1 | 1402.5 | 1391.7 | 1385.3 | 1374.6 | 1372.5 |
| 15° | 1413.2 | 1398.3 | 1387.4 | 1376.7 | 1372.5 | 1361.8 | 1346.8 | 1338.2 | 1325.3 | 1321.0 | 1310.3 |
| 17.5° | 1359.6 | 1344.6 | 1329.5 | 1325.3 | 1318.8 | 1303.9 | 1288.9 | 1278.1 | 1265.2 | 1258.8 | 1252.4 |
| 20° | 1303.9 | 1284.6 | 1269.5 | 1265.2 | 1256.7 | 1243.8 | 1228.8 | 1218.0 | 1207.3 | 1194.5 | 1188.0 |
| 22.5° | 1239.5 | 1218.0 | 1205.2 | 1194.5 | 1192.3 | 1177.3 | 1160.2 | 1151.5 | 1143.0 | 1132.3 | 1123.7 |
| 25° | 1168.8 | 1149.4 | 1134.4 | 1125.9 | 1121.6 | 1108.7 | 1095.8 | 1085.1 | 1072.2 | 1065.8 | 1055.1 |
| 27.5° | 1095.8 | 1082.9 | 1063.7 | 1055.1 | 1048.7 | 1037.9 | 1022.9 | 1016.5 | 1003.6 | 995.1 | 988.7 |
| 30° | 1025.0 | 1005.8 | 995.1 | 984.4 | 977.8 | 967.1 | 954.3 | 947.9 | 937.2 | 928.6 | 922.2 |
| 32.5° | 947.9 | 935.0 | 919.9 | 915.6 | 907.1 | 896.4 | 887.8 | 877.1 | 868.6 | 859.9 | 857.7 |
| 35° | 877.1 | 859.9 | 844.9 | 840.6 | 834.2 | 823.5 | 819.2 | 812.8 | 802.0 | 799.8 | 791.3 |
| 37.5° | 799.8 | 791.3 | 774.2 | 767.7 | 765.6 | 757.0 | 748.5 | 744.2 | 737.7 | 731.2 | 729.1 |
| 40° | 727.0 | 716.3 | 707.7 | 701.3 | 697.0 | 690.6 | 681.9 | 679.8 | 675.5 | 666.9 | 664.8 |
| 42.5° | 658.3 | 647.6 | 639.1 | 636.9 | 630.5 | 624.0 | 619.7 | 613.3 | 611.1 | 609.0 | 604.7 |
| 45° | 591.9 | 585.5 | 576.9 | 574.8 | 572.6 | 563.9 | 559.7 | 555.4 | 551.1 | 549.0 | 544.7 |
| 47.5° | 531.8 | 525.4 | 519.0 | 516.9 | 512.6 | 510.4 | 503.9 | 501.8 | 495.3 | 493.2 | 491.1 |
| 50° | 473.9 | 469.7 | 465.4 | 463.2 | 459.0 | 456.8 | 452.5 | 448.3 | 443.9 | 441.7 | 439.6 |
| 52.5° | 422.5 | 418.2 | 413.9 | 411.8 | 409.6 | 405.3 | 401.0 | 396.8 | 394.6 | 392.5 | 390.3 |
| 55° | 373.1 | 368.8 | 366.7 | 364.5 | 362.4 | 360.3 | 353.8 | 351.7 | 349.6 | 347.4 | 343.1 |
| 57.5° | 328.2 | 323.8 | 319.5 | 319.5 | 317.3 | 315.2 | 310.9 | 306.6 | 306.6 | 302.4 | 298.1 |
| 60° | 287.4 | 283.1 | 278.8 | 276.7 | 274.5 | 270.3 | 268.1 | 265.9 | 263.7 | 261.6 | 257.3 |
| 62.5° | 244.5 | 242.3 | 238.0 | 238.0 | 233.8 | 231.6 | 229.5 | 227.3 | 225.2 | 220.9 | 218.8 |
| 65° | 208.0 | 205.8 | 201.5 | 199.4 | 199.4 | 197.3 | 193.0 | 190.8 | 188.7 | 188.7 | 186.6 |
| 67.5° | 173.7 | 171.6 | 167.3 | 165.2 | 165.2 | 163.0 | 160.9 | 160.9 | 158.7 | 156.6 | 158.7 |
| 70° | 143.6 | 139.4 | 139.4 | 137.2 | 137.2 | 135.1 | 132.9 | 132.9 | 132.9 | 135.1 | 135.1 |
| 72.5° | 113.7 | 111.5 | 109.4 | 109.4 | 109.4 | 109.4 | 107.2 | 107.2 | 109.4 | 111.5 | 111.5 |
| 75° | 90.1 | 87.9 | 87.9 | 87.9 | 85.7 | 85.7 | 87.9 | 87.9 | 90.1 | 90.1 | 90.1 |
| 77.5° | 66.5 | 66.5 | 66.5 | 66.5 | 66.5 | 66.5 | 68.6 | 68.6 | 70.7 | 70.7 | 70.7 |
| 80° | 49.3 | 49.3 | 49.3 | 49.3 | 49.3 | 51.5 | 51.5 | 51.5 | 51.5 | 51.5 | 53.6 |
| 82.5° | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | 34.4 | 36.5 | 36.5 | 36.5 | 36.5 |
| 85° | 19.3 | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 |
| 87.5° | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P584352

CATALOG NUMBER: HC830D010-HM82555935-81WWW

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 | 1580.5 |
| 2.5° | 1548.3 | 1548.3 | 1548.3 | 1550.5 | 1546.2 | 1546.2 | 1546.2 | 1546.2 |
| 5° | 1511.8 | 1509.7 | 1507.5 | 1509.7 | 1505.4 | 1505.4 | 1503.3 | 1503.3 |
| 7.5° | 1466.9 | 1464.7 | 1462.6 | 1462.6 | 1458.3 | 1458.3 | 1456.0 | 1453.9 |
| 10° | 1417.5 | 1413.2 | 1415.4 | 1411.1 | 1409.0 | 1406.8 | 1404.7 | 1402.5 |
| 12.5° | 1363.9 | 1359.6 | 1357.5 | 1353.2 | 1348.9 | 1346.8 | 1348.9 | 1344.6 |
| 15° | 1306.0 | 1299.6 | 1297.4 | 1293.2 | 1288.9 | 1286.7 | 1286.7 | 1284.6 |
| 17.5° | 1241.7 | 1237.4 | 1235.3 | 1231.0 | 1228.8 | 1224.6 | 1222.4 | 1220.3 |
| 20° | 1181.6 | 1170.9 | 1173.1 | 1168.8 | 1166.6 | 1158.0 | 1158.0 | 1160.2 |
| 22.5° | 1115.2 | 1108.7 | 1104.5 | 1100.2 | 1097.9 | 1093.6 | 1093.6 | 1091.5 |
| 25° | 1048.7 | 1042.3 | 1040.0 | 1035.7 | 1033.6 | 1029.3 | 1027.2 | 1027.2 |
| 27.5° | 984.4 | 975.7 | 975.7 | 971.4 | 967.1 | 965.0 | 962.9 | 960.7 |
| 30° | 915.6 | 909.2 | 907.1 | 907.1 | 904.9 | 904.9 | 898.5 | 900.7 |
| 32.5° | 851.3 | 847.0 | 844.9 | 840.6 | 840.6 | 838.5 | 838.5 | 832.1 |
| 35° | 787.0 | 780.6 | 782.7 | 778.4 | 776.3 | 774.2 | 776.3 | 774.2 |
| 37.5° | 724.8 | 720.5 | 720.5 | 716.3 | 716.3 | 714.1 | 712.0 | 716.3 |
| 40° | 662.6 | 660.5 | 658.3 | 656.2 | 658.3 | 656.2 | 651.9 | 654.1 |
| 42.5° | 600.4 | 600.4 | 598.3 | 598.3 | 596.2 | 596.2 | 596.2 | 596.2 |
| 45° | 544.7 | 542.5 | 542.5 | 540.4 | 540.4 | 540.4 | 540.4 | 538.3 |
| 47.5° | 488.9 | 486.8 | 486.8 | 486.8 | 484.6 | 484.6 | 482.5 | 484.6 |
| 50° | 435.3 | 435.3 | 433.2 | 433.2 | 435.3 | 433.2 | 431.0 | 431.0 |
| 52.5° | 385.9 | 385.9 | 383.8 | 383.8 | 381.7 | 379.5 | 381.7 | 381.7 |
| 55° | 341.0 | 338.9 | 336.7 | 336.7 | 334.6 | 332.4 | 332.4 | 334.6 |
| 57.5° | 298.1 | 295.9 | 293.8 | 293.8 | 289.5 | 287.4 | 287.4 | 287.4 |
| 60° | 257.3 | 253.0 | 253.0 | 250.9 | 250.9 | 248.7 | 248.7 | 248.7 |
| 62.5° | 218.8 | 216.6 | 216.6 | 216.6 | 216.6 | 214.5 | 214.5 | 214.5 |
| 65° | 186.6 | 186.6 | 186.6 | 188.7 | 188.7 | 190.8 | 190.8 | 190.8 |
| 67.5° | 160.9 | 163.0 | 163.0 | 163.0 | 165.2 | 165.2 | 165.2 | 163.0 |
| 70° | 137.2 | 137.2 | 137.2 | 139.4 | 139.4 | 139.4 | 139.4 | 139.4 |
| 72.5° | 113.7 | 113.7 | 113.7 | 113.7 | 113.7 | 113.7 | 113.7 | 113.7 |
| 75° | 90.1 | 92.3 | 92.3 | 92.3 | 90.1 | 92.3 | 92.3 | 90.1 |
| 77.5° | 70.7 | 70.7 | 70.7 | 70.7 | 70.7 | 70.7 | 70.7 | 70.7 |
| 80° | 53.6 | 53.6 | 53.6 | 53.6 | 53.6 | 53.6 | 53.6 | 53.6 |
| 82.5° | 36.5 | 36.5 | 36.5 | 36.5 | 36.5 | 36.5 | 36.5 | 36.5 |
| 85° | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 |
| 87.5° | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 |
| 90° | 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)