

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P332089

Luminaire Tested: **S123DIP-S1165D1195U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332089  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-17,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DIP-S1165D1195U835-4F0-1E-UDD-F4  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1165 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1195 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9079.5 lumens  
Efficiency: N/A  
Efficacy: 126.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: General Diffuse

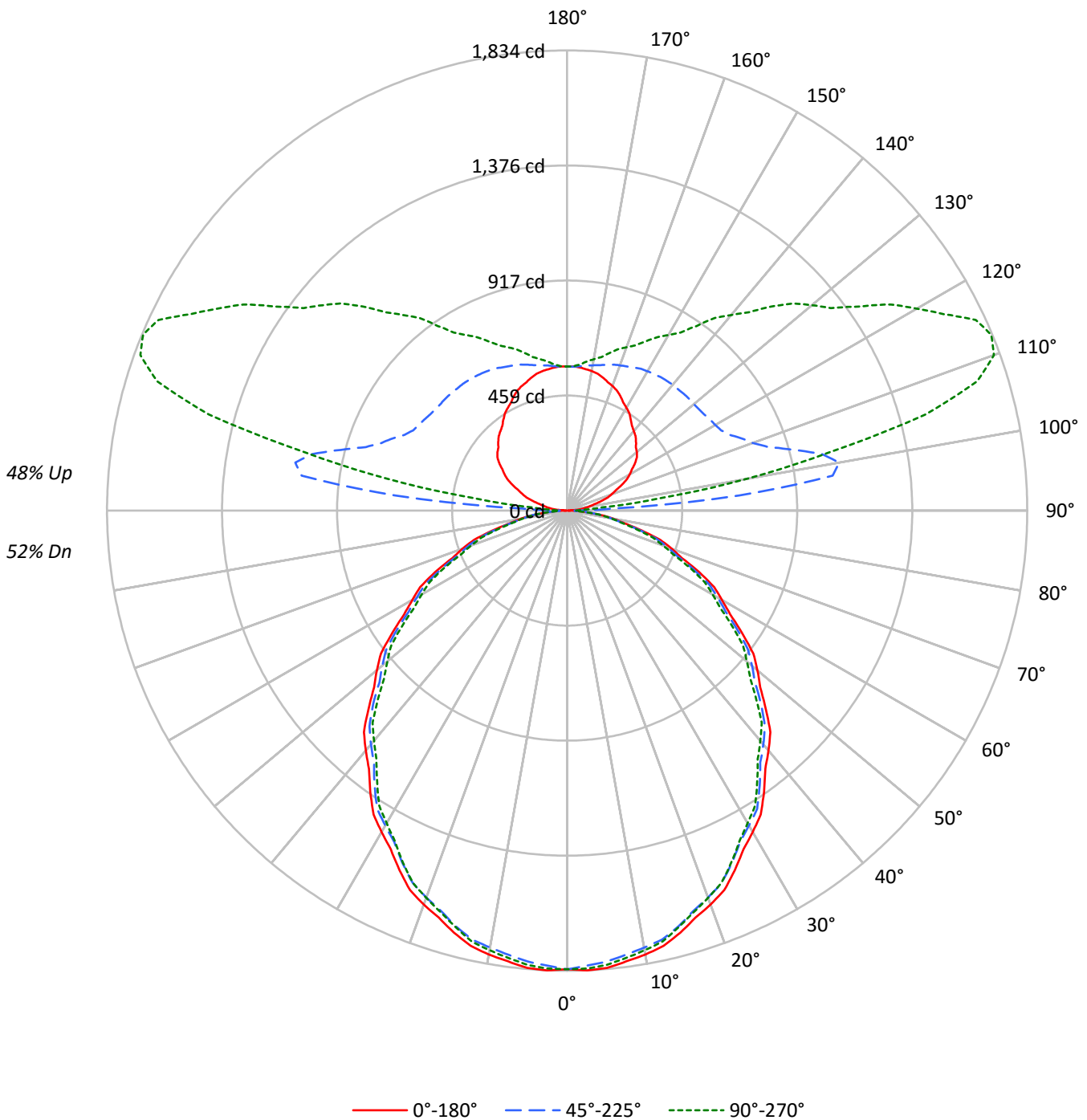
Input Watts (W): 71.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P332089

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### Luminous Intensity Polar Plot





TEST NUMBER: P332089

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**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 | 50 | 30 | 10 | 0 |  |  |  |    |  |  |  |  |  |  |  |  |   |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 0   | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 85 | 85 | 85 | 71 | 71 | 71 | 58 | 58 | 58 | 52 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 98  | 94  | 90  | 86  | 91  | 87  | 84  | 81  | 74 | 72 | 69 | 62 | 61 | 59 | 51 | 50 | 49 | 44 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 89  | 82  | 76  | 71  | 82  | 76  | 71  | 66  | 65 | 61 | 57 | 55 | 52 | 49 | 45 | 43 | 41 | 37 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 82  | 72  | 65  | 59  | 75  | 67  | 60  | 55  | 57 | 52 | 48 | 48 | 45 | 42 | 40 | 37 | 35 | 31 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 75  | 64  | 56  | 50  | 69  | 59  | 52  | 47  | 51 | 45 | 41 | 43 | 39 | 36 | 36 | 33 | 30 | 27 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 68  | 57  | 49  | 43  | 63  | 53  | 46  | 40  | 46 | 40 | 35 | 39 | 34 | 31 | 32 | 29 | 26 | 23 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 63  | 51  | 43  | 37  | 58  | 48  | 40  | 35  | 41 | 35 | 31 | 35 | 30 | 27 | 29 | 26 | 23 | 20 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 58  | 46  | 38  | 32  | 54  | 43  | 36  | 31  | 37 | 31 | 27 | 32 | 27 | 24 | 27 | 23 | 21 | 18 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 54  | 42  | 34  | 29  | 50  | 39  | 32  | 27  | 34 | 28 | 24 | 29 | 25 | 21 | 25 | 21 | 18 | 16 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 50  | 38  | 31  | 25  | 47  | 36  | 29  | 24  | 31 | 26 | 22 | 27 | 22 | 19 | 23 | 19 | 17 | 15 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 47  | 35  | 28  | 23  | 44  | 33  | 26  | 22  | 29 | 23 | 20 | 25 | 20 | 17 | 21 | 18 | 15 | 13 |    |    |    |    |    |   |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 19678 | 19678 | 19678 |
| 5°  | 19770 | 19498 | 19634 |
| 10° | 19638 | 19329 | 19449 |
| 15° | 19409 | 19110 | 19146 |
| 20° | 19140 | 18798 | 18816 |
| 25° | 18781 | 18427 | 18389 |
| 30° | 18385 | 18013 | 17877 |
| 35° | 17971 | 17578 | 17350 |
| 40° | 17537 | 17096 | 16831 |
| 45° | 17061 | 16653 | 16247 |
| 50° | 16583 | 16109 | 15662 |
| 55° | 15959 | 15546 | 15073 |
| 60° | 15330 | 14889 | 14415 |
| 65° | 14772 | 14174 | 13733 |
| 70° | 13951 | 13357 | 12765 |
| 75° | 12747 | 12289 | 11765 |
| 80° | 11499 | 11009 | 10916 |
| 85° | 10090 | 9707  | 9324  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 172.2  | 1.9       |
| 10°-20°   | 486.2  | 5.4       |
| 20°-30°   | 718.3  | 7.9       |
| 30°-40°   | 839.0  | 9.2       |
| 40°-50°   | 843.5  | 9.3       |
| 50°-60°   | 740.9  | 8.2       |
| 60°-70°   | 552.0  | 6.1       |
| 70°-80°   | 314.5  | 3.5       |
| 80°-90°   | 94.7   | 1.0       |
| 90°-100°  | 319.4  | 3.5       |
| 100°-110° | 904.4  | 10.0      |
| 110°-120° | 889.7  | 9.8       |
| 120°-130° | 709.7  | 7.8       |
| 130°-140° | 559.5  | 6.2       |
| 140°-150° | 417.6  | 4.6       |
| 150°-160° | 291.1  | 3.2       |
| 160°-170° | 171.0  | 1.9       |
| 170°-180° | 55.6   | 0.6       |
| 0°-30°    | 1376.7 | 15.2      |
| 0°-40°    | 2215.7 | 24.4      |
| 0°-60°    | 3800.2 | 41.9      |
| 0°-90°    | 4761.4 | 52.4      |
| 90°-120°  | 2113.6 | 23.3      |
| 90°-150°  | 3800.4 | 41.9      |
| 90°-180°  | 4318.0 | 47.6      |
| 0°-180°   | 9079.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1828 | 1828  | 1828 | 1828  | 1828 |      |
| 5°   | 1830 | 1821  | 1804 | 1819  | 1817 | 173  |
| 15°  | 1742 | 1735  | 1715 | 1726  | 1718 | 491  |
| 25°  | 1581 | 1571  | 1552 | 1553  | 1548 | 728  |
| 35°  | 1368 | 1358  | 1338 | 1328  | 1320 | 855  |
| 45°  | 1121 | 1114  | 1094 | 1076  | 1067 | 865  |
| 55°  | 850  | 848   | 828  | 812   | 803  | 761  |
| 65°  | 580  | 572   | 556  | 544   | 539  | 572  |
| 75°  | 306  | 300   | 296  | 288   | 283  | 328  |
| 85°  | 82   | 79    | 79   | 76    | 76   | 90   |
| 90°  | 2    | 14    | 29   | 33    | 34   | 7    |
| 95°  | 40   | 128   | 689  | 201   | 135  | 43   |
| 105° | 135  | 199   | 934  | 1634  | 1478 | 143  |
| 115° | 238  | 297   | 714  | 1567  | 1797 | 236  |
| 125° | 331  | 391   | 667  | 1208  | 1418 | 294  |
| 135° | 388  | 463   | 658  | 995   | 1149 | 300  |
| 145° | 443  | 507   | 650  | 816   | 898  | 277  |
| 155° | 503  | 543   | 629  | 715   | 745  | 231  |
| 165° | 550  | 565   | 602  | 638   | 650  | 155  |
| 175° | 573  | 573   | 577  | 586   | 584  | 54   |
| 180° | 574  | 574   | 574  | 574   | 574  |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1828.1 | 1828.1 | 1828.1 | 1828.1 | 1828.1 | 1828.1 | 1828.1 | 1828.1 | 1828.1 | 1828.1 | 1828.1 |
| 2.5°   | 1834.4 | 1833.3 | 1832.2 | 1831.1 | 1829.9 | 1827.8 | 1824.8 | 1821.7 | 1818.6 | 1815.5 | 1818.3 |
| 5°     | 1829.7 | 1828.0 | 1826.2 | 1824.5 | 1822.7 | 1819.9 | 1816.1 | 1812.2 | 1808.4 | 1804.5 | 1808.0 |
| 7.5°   | 1811.8 | 1810.0 | 1808.3 | 1806.5 | 1804.8 | 1801.9 | 1797.9 | 1794.0 | 1790.0 | 1786.0 | 1789.1 |
| 10°    | 1796.7 | 1794.9 | 1793.2 | 1791.4 | 1789.7 | 1786.6 | 1782.0 | 1777.5 | 1772.9 | 1768.4 | 1771.5 |
| 12.5°  | 1776.6 | 1775.1 | 1773.6 | 1772.2 | 1770.7 | 1767.8 | 1763.6 | 1759.3 | 1755.0 | 1750.8 | 1753.1 |
| 15°    | 1741.7 | 1740.3 | 1738.9 | 1737.5 | 1736.1 | 1733.1 | 1728.6 | 1724.0 | 1719.5 | 1714.9 | 1717.7 |
| 17.5°  | 1701.1 | 1699.3 | 1697.5 | 1695.7 | 1693.8 | 1690.7 | 1686.1 | 1681.6 | 1677.0 | 1672.5 | 1674.5 |
| 20°    | 1670.9 | 1668.8 | 1666.7 | 1664.6 | 1662.6 | 1659.2 | 1654.7 | 1650.2 | 1645.6 | 1641.1 | 1642.5 |
| 22.5°  | 1637.0 | 1634.9 | 1632.8 | 1630.7 | 1628.6 | 1625.3 | 1620.7 | 1616.2 | 1611.7 | 1607.1 | 1608.2 |
| 25°    | 1581.3 | 1579.2 | 1577.1 | 1575.0 | 1573.0 | 1569.6 | 1565.1 | 1560.6 | 1556.0 | 1551.5 | 1551.8 |
| 27.5°  | 1521.9 | 1519.9 | 1517.9 | 1515.8 | 1513.8 | 1510.4 | 1505.5 | 1500.6 | 1495.7 | 1490.8 | 1491.1 |
| 30°    | 1479.2 | 1477.4 | 1475.7 | 1473.9 | 1472.2 | 1468.9 | 1464.0 | 1459.1 | 1454.2 | 1449.3 | 1449.3 |
| 32.5°  | 1436.4 | 1434.1 | 1431.8 | 1429.5 | 1427.2 | 1424.1 | 1420.4 | 1416.6 | 1412.8 | 1409.1 | 1407.1 |
| 35°    | 1367.6 | 1365.5 | 1363.4 | 1361.3 | 1359.2 | 1355.9 | 1351.3 | 1346.8 | 1342.2 | 1337.7 | 1335.6 |
| 37.5°  | 1297.1 | 1294.5 | 1291.8 | 1289.2 | 1286.5 | 1282.9 | 1278.3 | 1273.7 | 1269.1 | 1264.4 | 1261.9 |
| 40°    | 1248.1 | 1246.0 | 1243.9 | 1241.8 | 1239.7 | 1236.2 | 1231.3 | 1226.4 | 1221.5 | 1216.7 | 1213.9 |
| 42.5°  | 1199.0 | 1196.7 | 1194.3 | 1191.9 | 1189.5 | 1185.9 | 1181.0 | 1176.1 | 1171.2 | 1166.4 | 1163.6 |
| 45°    | 1120.8 | 1119.4 | 1118.0 | 1116.6 | 1115.2 | 1112.2 | 1107.7 | 1103.1 | 1098.6 | 1094.0 | 1089.9 |
| 47.5°  | 1043.1 | 1041.1 | 1039.1 | 1037.0 | 1035.0 | 1031.9 | 1027.6 | 1023.3 | 1019.1 | 1014.8 | 1010.7 |
| 50°    | 990.3  | 988.6  | 986.8  | 985.1  | 983.3  | 980.2  | 975.6  | 971.1  | 966.5  | 962.0  | 958.2  |
| 52.5°  | 935.0  | 933.8  | 932.6  | 931.4  | 930.2  | 927.2  | 922.4  | 917.6  | 912.8  | 907.9  | 904.6  |
| 55°    | 850.4  | 850.1  | 849.7  | 849.4  | 849.0  | 846.6  | 842.0  | 837.5  | 832.9  | 828.4  | 824.6  |
| 57.5°  | 769.9  | 768.7  | 767.5  | 766.4  | 765.2  | 762.8  | 759.1  | 755.5  | 751.9  | 748.2  | 744.8  |
| 60°    | 712.1  | 711.7  | 711.4  | 711.0  | 710.7  | 708.4  | 704.2  | 700.0  | 695.8  | 691.6  | 688.5  |
| 62.5°  | 660.5  | 659.6  | 658.7  | 657.8  | 656.9  | 654.3  | 650.1  | 645.9  | 641.8  | 637.6  | 634.4  |
| 65°    | 580.0  | 578.3  | 576.5  | 574.8  | 573.0  | 570.4  | 566.9  | 563.4  | 559.9  | 556.5  | 553.7  |
| 67.5°  | 494.8  | 493.3  | 491.8  | 490.2  | 488.7  | 486.6  | 483.9  | 481.3  | 478.6  | 476.0  | 473.5  |
| 70°    | 443.3  | 441.2  | 439.1  | 437.0  | 434.9  | 432.8  | 430.7  | 428.6  | 426.5  | 424.4  | 422.0  |
| 72.5°  | 389.2  | 387.7  | 386.1  | 384.6  | 383.1  | 381.1  | 378.7  | 376.3  | 374.0  | 371.6  | 369.4  |
| 75°    | 306.5  | 305.1  | 303.7  | 302.3  | 300.9  | 299.7  | 298.7  | 297.6  | 296.6  | 295.5  | 293.8  |
| 77.5°  | 233.3  | 232.5  | 231.7  | 231.0  | 230.2  | 229.2  | 227.9  | 226.7  | 225.4  | 224.2  | 223.0  |
| 80°    | 185.5  | 184.4  | 183.4  | 182.3  | 181.3  | 180.4  | 179.7  | 179.0  | 178.3  | 177.6  | 177.3  |
| 82.5°  | 139.0  | 138.7  | 138.5  | 138.3  | 138.1  | 137.9  | 137.8  | 137.7  | 137.5  | 137.4  | 136.8  |
| 85°    | 81.7   | 81.0   | 80.3   | 79.6   | 78.9   | 78.6   | 78.6   | 78.6   | 78.6   | 78.6   | 77.9   |
| 87.5°  | 33.2   | 32.8   | 32.4   | 32.3   | 31.9   | 31.8   | 32.2   | 32.6   | 33.1   | 33.5   | 33.0   |
| 90°    | 2.3    | 4.6    | 7.0    | 10.5   | 12.8   | 15.1   | 18.6   | 22.1   | 25.6   | 29.0   | 27.9   |
| 92.5°  | 14.4   | 21.4   | 31.1   | 40.2   | 50.0   | 67.2   | 97.6   | 147.6  | 196.6  | 178.7  | 134.8  |
| 95°    | 39.5   | 43.0   | 55.8   | 75.5   | 105.7  | 151.0  | 249.8  | 422.9  | 613.5  | 689.0  | 558.8  |
| 97.5°  | 67.4   | 68.5   | 78.5   | 95.7   | 125.5  | 174.5  | 268.9  | 464.0  | 781.7  | 1067.7 | 1142.3 |
| 100°   | 86.0   | 87.1   | 95.3   | 111.5  | 139.4  | 184.7  | 266.1  | 438.0  | 743.6  | 1100.3 | 1329.2 |
| 102.5° | 105.5  | 107.6  | 114.8  | 130.1  | 155.2  | 196.8  | 269.8  | 415.7  | 687.8  | 1039.9 | 1338.4 |
| 105°   | 134.8  | 138.3  | 145.2  | 159.2  | 181.2  | 217.3  | 280.0  | 399.7  | 619.3  | 934.1  | 1267.6 |
| 107.5° | 165.9  | 169.4  | 176.1  | 189.8  | 210.5  | 244.0  | 299.1  | 398.5  | 575.6  | 840.7  | 1143.5 |
| 110°   | 188.2  | 191.7  | 197.5  | 210.3  | 230.0  | 262.6  | 314.9  | 403.2  | 558.8  | 787.7  | 1065.4 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 208.7 | 212.2 | 218.0 | 230.7 | 250.5 | 282.1 | 330.7 | 412.5 | 549.6 | 752.4 | 997.6 |
| 115°   | 238.2 | 242.8 | 249.8 | 261.4 | 281.2 | 312.5 | 356.7 | 427.6 | 546.1 | 714.5 | 915.5 |
| 117.5° | 267.7 | 273.0 | 278.8 | 289.5 | 311.6 | 340.7 | 384.3 | 447.5 | 548.2 | 692.2 | 866.0 |
| 120°   | 288.1 | 291.6 | 297.4 | 309.1 | 331.1 | 360.2 | 402.0 | 462.4 | 551.9 | 682.0 | 840.0 |
| 122.5° | 305.8 | 309.3 | 315.1 | 327.6 | 348.8 | 379.7 | 420.6 | 476.4 | 558.4 | 675.5 | 818.6 |
| 125°   | 331.1 | 333.5 | 340.4 | 353.2 | 375.3 | 406.6 | 447.3 | 498.4 | 568.1 | 666.9 | 791.2 |
| 127.5° | 350.4 | 353.9 | 362.5 | 375.5 | 399.9 | 431.3 | 470.5 | 516.6 | 579.3 | 662.7 | 767.1 |
| 130°   | 362.5 | 366.0 | 376.4 | 390.4 | 414.8 | 446.1 | 484.5 | 528.6 | 586.7 | 659.9 | 754.0 |
| 132.5° | 371.8 | 376.2 | 387.6 | 404.3 | 428.7 | 459.2 | 496.6 | 539.8 | 592.3 | 659.0 | 742.0 |
| 135°   | 388.1 | 392.7 | 405.5 | 422.9 | 447.3 | 478.7 | 514.7 | 554.2 | 600.7 | 657.6 | 726.2 |
| 137.5° | 403.4 | 408.3 | 420.8 | 439.4 | 463.6 | 492.6 | 527.2 | 564.9 | 606.3 | 655.0 | 712.4 |
| 140°   | 413.6 | 419.4 | 431.0 | 449.6 | 472.9 | 501.9 | 535.6 | 570.5 | 610.0 | 654.1 | 704.1 |
| 142.5° | 424.8 | 429.7 | 442.2 | 458.9 | 482.2 | 509.4 | 542.1 | 576.0 | 612.8 | 652.3 | 696.6 |
| 145°   | 442.7 | 446.1 | 456.6 | 474.0 | 493.8 | 520.5 | 550.7 | 582.1 | 614.6 | 649.5 | 686.7 |
| 147.5° | 460.8 | 462.9 | 473.1 | 488.2 | 507.3 | 530.0 | 557.7 | 585.8 | 614.6 | 645.1 | 676.9 |
| 150°   | 472.9 | 474.0 | 483.3 | 498.4 | 514.7 | 535.6 | 562.3 | 586.7 | 614.6 | 641.3 | 670.4 |
| 152.5° | 485.0 | 485.2 | 494.5 | 507.7 | 522.1 | 542.1 | 565.1 | 588.6 | 611.8 | 636.7 | 663.0 |
| 155°   | 503.1 | 503.1 | 510.1 | 521.7 | 534.4 | 550.7 | 570.5 | 589.1 | 608.8 | 628.6 | 651.8 |
| 157.5° | 517.5 | 518.4 | 524.0 | 534.2 | 545.1 | 557.7 | 573.5 | 590.2 | 604.9 | 621.4 | 639.2 |
| 160°   | 528.6 | 528.6 | 533.3 | 542.6 | 550.7 | 562.3 | 576.3 | 590.2 | 603.0 | 615.8 | 630.9 |
| 162.5° | 537.0 | 537.0 | 540.7 | 548.2 | 555.4 | 565.1 | 577.2 | 589.3 | 599.3 | 610.2 | 622.5 |
| 165°   | 549.6 | 548.4 | 550.7 | 556.5 | 561.2 | 569.3 | 578.6 | 586.7 | 593.7 | 601.8 | 611.1 |
| 167.5° | 559.1 | 557.7 | 558.8 | 563.3 | 566.5 | 571.6 | 578.4 | 584.9 | 588.1 | 593.5 | 600.2 |
| 170°   | 564.7 | 562.3 | 563.5 | 567.0 | 569.3 | 571.6 | 577.4 | 582.1 | 584.4 | 587.9 | 593.7 |
| 172.5° | 568.4 | 567.0 | 567.2 | 569.8 | 571.2 | 572.6 | 577.4 | 581.2 | 581.6 | 583.2 | 587.2 |
| 175°   | 572.8 | 571.6 | 570.5 | 572.8 | 572.8 | 574.0 | 576.3 | 578.6 | 577.4 | 577.4 | 579.8 |
| 177.5° | 574.9 | 574.0 | 573.0 | 574.0 | 574.0 | 574.0 | 574.9 | 576.7 | 574.9 | 574.0 | 574.9 |
| 180°   | 574.0 | 574.0 | 574.0 | 574.0 | 574.0 | 574.0 | 574.0 | 574.0 | 574.0 | 574.0 | 574.0 |



TEST NUMBER: P332089

CATALOG NUMBER: S123DIP-S1165D1195U835-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1828.1 | 1828.1 | 1828.1 | 1828.1 | 1828.1 | 1828.1 | 1828.1 | 1828.1 |
| 2.5°   | 1821.1 | 1823.9 | 1826.7 | 1828.0 | 1827.7 | 1827.4 | 1827.1 | 1826.9 |
| 5°     | 1811.5 | 1815.0 | 1818.5 | 1819.9 | 1819.2 | 1818.5 | 1817.8 | 1817.1 |
| 7.5°   | 1792.3 | 1795.4 | 1798.6 | 1799.9 | 1799.5 | 1799.1 | 1798.7 | 1798.3 |
| 10°    | 1774.7 | 1777.8 | 1781.0 | 1782.2 | 1781.5 | 1780.8 | 1780.1 | 1779.4 |
| 12.5°  | 1755.4 | 1757.7 | 1760.0 | 1761.0 | 1760.5 | 1760.1 | 1759.7 | 1759.3 |
| 15°    | 1720.5 | 1723.3 | 1726.1 | 1726.5 | 1724.4 | 1722.3 | 1720.2 | 1718.1 |
| 17.5°  | 1676.4 | 1678.4 | 1680.3 | 1680.9 | 1680.2 | 1679.4 | 1678.6 | 1677.9 |
| 20°    | 1643.9 | 1645.3 | 1646.7 | 1646.8 | 1645.8 | 1644.7 | 1643.7 | 1642.6 |
| 22.5°  | 1609.4 | 1610.5 | 1611.6 | 1611.5 | 1610.2 | 1608.8 | 1607.5 | 1606.2 |
| 25°    | 1552.2 | 1552.5 | 1552.9 | 1552.5 | 1551.5 | 1550.4 | 1549.4 | 1548.3 |
| 27.5°  | 1491.4 | 1491.6 | 1491.9 | 1491.4 | 1490.1 | 1488.7 | 1487.4 | 1486.1 |
| 30°    | 1449.3 | 1449.3 | 1449.3 | 1448.1 | 1445.6 | 1443.2 | 1440.7 | 1438.3 |
| 32.5°  | 1405.1 | 1403.2 | 1401.2 | 1399.6 | 1398.3 | 1396.9 | 1395.6 | 1394.3 |
| 35°    | 1333.5 | 1331.4 | 1329.3 | 1327.4 | 1325.6 | 1323.9 | 1322.1 | 1320.4 |
| 37.5°  | 1259.4 | 1256.9 | 1254.4 | 1252.6 | 1251.4 | 1250.3 | 1249.2 | 1248.1 |
| 40°    | 1211.1 | 1208.3 | 1205.5 | 1203.4 | 1202.0 | 1200.6 | 1199.2 | 1197.8 |
| 42.5°  | 1160.8 | 1158.0 | 1155.2 | 1153.1 | 1151.7 | 1150.3 | 1148.9 | 1147.5 |
| 45°    | 1085.7 | 1081.5 | 1077.3 | 1074.3 | 1072.6 | 1070.8 | 1069.1 | 1067.3 |
| 47.5°  | 1006.6 | 1002.5 | 998.3  | 995.5  | 994.0  | 992.4  | 990.9  | 989.4  |
| 50°    | 954.3  | 950.5  | 946.6  | 943.7  | 941.6  | 939.5  | 937.4  | 935.3  |
| 52.5°  | 901.4  | 898.1  | 894.8  | 892.1  | 890.0  | 887.9  | 885.8  | 883.7  |
| 55°    | 820.7  | 816.9  | 813.0  | 810.2  | 808.5  | 806.7  | 805.0  | 803.2  |
| 57.5°  | 741.4  | 738.0  | 734.5  | 731.8  | 729.8  | 727.8  | 725.7  | 723.7  |
| 60°    | 685.4  | 682.2  | 679.1  | 676.6  | 674.9  | 673.1  | 671.4  | 669.6  |
| 62.5°  | 631.3  | 628.1  | 625.0  | 622.8  | 621.6  | 620.4  | 619.3  | 618.1  |
| 65°    | 550.9  | 548.1  | 545.3  | 543.4  | 542.3  | 541.3  | 540.2  | 539.2  |
| 67.5°  | 471.1  | 468.6  | 466.2  | 464.2  | 462.8  | 461.3  | 459.8  | 458.4  |
| 70°    | 419.5  | 417.1  | 414.6  | 412.5  | 410.8  | 409.0  | 407.3  | 405.6  |
| 72.5°  | 367.3  | 365.1  | 362.9  | 361.4  | 360.5  | 359.6  | 358.7  | 357.8  |
| 75°    | 292.0  | 290.3  | 288.5  | 287.1  | 286.1  | 285.0  | 284.0  | 282.9  |
| 77.5°  | 221.8  | 220.6  | 219.4  | 218.8  | 218.8  | 218.8  | 218.8  | 218.8  |
| 80°    | 176.9  | 176.6  | 176.2  | 176.1  | 176.1  | 176.1  | 176.1  | 176.1  |
| 82.5°  | 136.1  | 135.5  | 134.9  | 134.4  | 134.1  | 133.9  | 133.6  | 133.3  |
| 85°    | 77.2   | 76.5   | 75.8   | 75.5   | 75.5   | 75.5   | 75.5   | 75.5   |
| 87.5°  | 32.9   | 32.9   | 32.8   | 33.1   | 32.9   | 33.1   | 33.4   | 33.1   |
| 90°    | 29.0   | 30.2   | 31.4   | 33.7   | 32.5   | 33.7   | 34.9   | 33.7   |
| 92.5°  | 97.8   | 77.6   | 68.5   | 62.5   | 60.4   | 56.9   | 58.1   | 56.0   |
| 95°    | 418.3  | 283.5  | 221.9  | 180.1  | 158.0  | 147.6  | 139.4  | 134.8  |
| 97.5°  | 1042.6 | 835.1  | 685.3  | 546.3  | 460.6  | 408.3  | 376.9  | 366.9  |
| 100°   | 1369.8 | 1275.7 | 1139.8 | 974.8  | 857.4  | 772.6  | 727.3  | 728.5  |
| 102.5° | 1478.6 | 1475.5 | 1396.3 | 1291.7 | 1200.4 | 1133.3 | 1095.4 | 1068.7 |
| 105°   | 1510.4 | 1626.6 | 1648.7 | 1618.5 | 1565.0 | 1520.9 | 1483.7 | 1477.9 |
| 107.5° | 1418.8 | 1607.5 | 1709.3 | 1750.7 | 1751.6 | 1736.7 | 1724.2 | 1713.5 |
| 110°   | 1331.5 | 1545.3 | 1691.7 | 1773.0 | 1805.5 | 1814.8 | 1812.5 | 1810.2 |





TEST NUMBER: P332089

CATALOG NUMBER: S123DIP-S1165D1195U835-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 1245.0 | 1463.5 | 1627.5 | 1732.1 | 1791.6 | 1820.4 | 1829.2 | 1829.7 |
| 115°   | 1130.5 | 1332.6 | 1503.4 | 1630.1 | 1717.2 | 1768.3 | 1791.6 | 1797.4 |
| 117.5° | 1047.5 | 1222.0 | 1375.4 | 1503.9 | 1594.8 | 1653.3 | 1686.8 | 1694.7 |
| 120°   | 1003.8 | 1160.7 | 1300.1 | 1417.5 | 1509.2 | 1574.3 | 1602.2 | 1609.2 |
| 122.5° | 969.4  | 1111.4 | 1240.6 | 1349.6 | 1431.2 | 1489.7 | 1520.4 | 1529.2 |
| 125°   | 923.7  | 1050.3 | 1161.8 | 1254.8 | 1329.2 | 1380.3 | 1409.3 | 1417.5 |
| 127.5° | 883.7  | 996.6  | 1097.2 | 1181.8 | 1248.1 | 1291.7 | 1318.0 | 1325.4 |
| 130°   | 858.6  | 963.2  | 1057.3 | 1136.3 | 1197.9 | 1239.7 | 1264.1 | 1273.4 |
| 132.5° | 835.4  | 931.6  | 1019.2 | 1094.5 | 1152.3 | 1194.1 | 1215.8 | 1222.3 |
| 135°   | 804.0  | 886.5  | 962.0  | 1028.2 | 1085.2 | 1120.0 | 1140.9 | 1149.1 |
| 137.5° | 775.4  | 843.0  | 908.1  | 965.5  | 1013.4 | 1048.7 | 1066.3 | 1071.7 |
| 140°   | 758.7  | 817.9  | 873.7  | 923.7  | 967.8  | 1000.4 | 1018.9 | 1017.8 |
| 142.5° | 742.9  | 793.8  | 842.1  | 885.6  | 923.2  | 952.0  | 968.7  | 967.6  |
| 145°   | 723.8  | 762.2  | 799.4  | 833.0  | 862.1  | 886.5  | 895.8  | 898.1  |
| 147.5° | 708.3  | 738.7  | 768.7  | 792.6  | 814.7  | 831.2  | 840.0  | 840.9  |
| 150°   | 697.1  | 723.8  | 748.2  | 770.3  | 787.7  | 800.5  | 807.5  | 807.5  |
| 152.5° | 686.9  | 709.9  | 731.5  | 749.9  | 763.6  | 775.4  | 779.6  | 779.6  |
| 155°   | 671.5  | 690.1  | 707.6  | 721.5  | 732.0  | 741.3  | 743.6  | 744.7  |
| 157.5° | 655.3  | 670.9  | 684.3  | 695.2  | 704.3  | 711.3  | 713.1  | 712.9  |
| 160°   | 646.0  | 658.8  | 670.4  | 678.5  | 686.7  | 693.6  | 693.6  | 692.5  |
| 162.5° | 634.8  | 645.8  | 656.4  | 663.6  | 669.0  | 675.0  | 675.0  | 673.9  |
| 165°   | 620.4  | 627.4  | 635.5  | 641.3  | 646.0  | 650.6  | 649.5  | 649.5  |
| 167.5° | 607.9  | 613.2  | 617.9  | 622.1  | 624.1  | 627.4  | 626.2  | 626.2  |
| 170°   | 599.5  | 603.0  | 607.6  | 610.0  | 611.1  | 613.5  | 612.3  | 612.3  |
| 172.5° | 592.1  | 594.6  | 598.4  | 599.7  | 600.0  | 602.3  | 600.2  | 599.3  |
| 175°   | 582.1  | 583.2  | 585.6  | 585.6  | 585.6  | 586.7  | 585.6  | 584.4  |
| 177.5° | 575.8  | 576.7  | 577.7  | 577.7  | 576.7  | 577.7  | 575.8  | 575.8  |
| 180°   | 574.0  | 574.0  | 574.0  | 574.0  | 574.0  | 574.0  | 574.0  | 574.0  |

(END OF REPORT)