

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P831803

Luminaire Tested: S123RDIP-S1000D1195U850-4F0-1E-UDD-G4

Issue Date: 05/03/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P831803  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-905-2, G3-1807-864-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 05/03/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDIP-S1000D1195U850-4F0-1E-UDD-G4  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT, GRAZE OPTIC  
UPLIGHT 1195 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: -

**Summary**

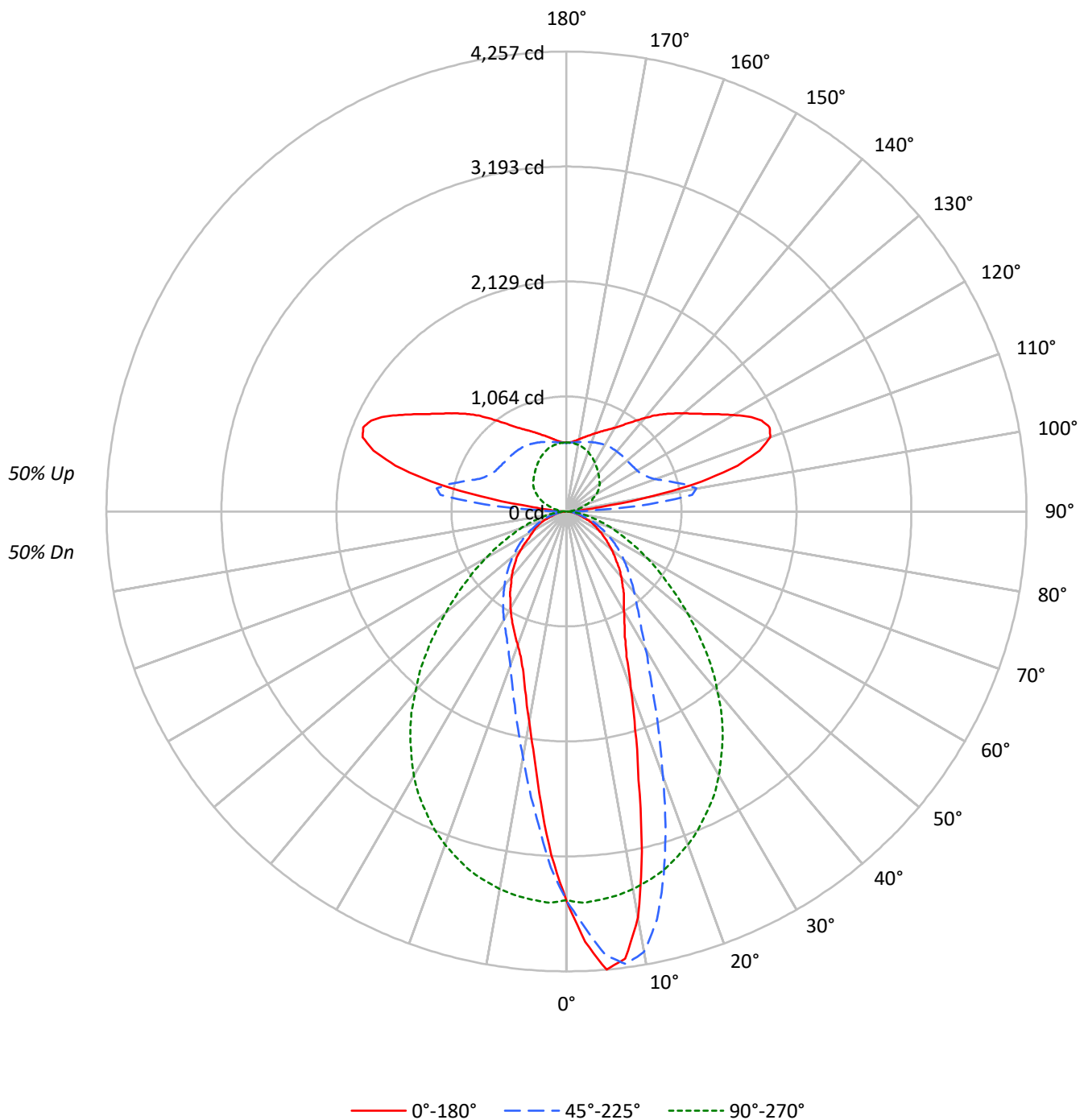
Lumens per Lamp: N/A  
Luminaire Lumens: 9562.8 lumens  
Efficiency: N/A  
Efficacy: 144.7 lumens/watt  
Spacing Criteria (0/90/45): 0.55 / 1.17 / 0.8  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 66.1  
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: 24 FT

TEST NUMBER: P831803

CATALOG NUMBER: S123RDIP-S1000D1195U850-4F0-1E-UDD-G4

### Luminous Intensity Polar Plot



TEST NUMBER: P831803

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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 | 30 | 10 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 56 | 56 | 56 |
| 1   | 99  | 95  | 91  | 88  | 91 | 87 | 84 | 82 | 74 | 72 | 70 | 62 | 60 | 59 | 51 | 50 | 49 |
| 2   | 90  | 84  | 78  | 73  | 83 | 77 | 73 | 68 | 66 | 62 | 59 | 55 | 53 | 51 | 46 | 44 | 42 |
| 3   | 83  | 74  | 67  | 62  | 77 | 69 | 63 | 58 | 59 | 55 | 51 | 50 | 47 | 44 | 41 | 39 | 37 |
| 4   | 76  | 66  | 59  | 53  | 71 | 62 | 55 | 50 | 53 | 48 | 44 | 45 | 41 | 39 | 38 | 35 | 33 |
| 5   | 71  | 60  | 52  | 46  | 65 | 56 | 49 | 44 | 48 | 43 | 39 | 41 | 37 | 34 | 34 | 32 | 29 |
| 6   | 65  | 54  | 46  | 41  | 60 | 50 | 44 | 39 | 44 | 38 | 35 | 38 | 34 | 30 | 32 | 29 | 26 |
| 7   | 61  | 49  | 42  | 36  | 56 | 46 | 39 | 34 | 40 | 35 | 31 | 35 | 30 | 27 | 29 | 26 | 24 |
| 8   | 57  | 45  | 38  | 33  | 52 | 42 | 36 | 31 | 37 | 32 | 28 | 32 | 28 | 25 | 27 | 24 | 22 |
| 9   | 53  | 41  | 34  | 29  | 49 | 39 | 32 | 28 | 34 | 29 | 25 | 30 | 26 | 23 | 25 | 22 | 20 |
| 10  | 50  | 38  | 31  | 27  | 46 | 36 | 30 | 26 | 32 | 27 | 23 | 28 | 24 | 21 | 24 | 21 | 19 |

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

|     | 0°    | 45°   | 90°   | 135°  | 180°  |
|-----|-------|-------|-------|-------|-------|
| 0°  | 38736 | 38736 | 38736 | 38736 | 38736 |
| 5°  | 45995 | 44529 | 38980 | 31511 | 29255 |
| 10° | 41673 | 45228 | 38786 | 25247 | 21659 |
| 15° | 28691 | 38780 | 38376 | 20635 | 17133 |
| 20° | 19961 | 29857 | 37606 | 17400 | 15060 |
| 25° | 15210 | 22755 | 36485 | 15465 | 13879 |
| 30° | 13241 | 18192 | 35082 | 14359 | 12855 |
| 35° | 12156 | 15347 | 33097 | 13427 | 11924 |
| 40° | 11092 | 13704 | 30498 | 12513 | 11071 |
| 45° | 10018 | 12533 | 27694 | 11645 | 10219 |
| 50° | 9093  | 11563 | 24387 | 10798 | 9167  |
| 55° | 8223  | 10620 | 21210 | 9969  | 7863  |
| 60° | 7369  | 9655  | 18424 | 9052  | 7434  |
| 65° | 6803  | 8568  | 15860 | 8135  | 7027  |
| 70° | 5526  | 7405  | 13838 | 7361  | 5712  |
| 75° | 4849  | 5889  | 11720 | 6105  | 5032  |
| 80° | 4389  | 4984  | 9602  | 5120  | 4754  |
| 85° | 4014  | 4372  | 7287  | 4644  | 4372  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 80°

Vertical Angle: 45°

Luminance: 29221 cd/sqm

TEST NUMBER: P831803

CATALOG NUMBER: S123RDIP-S1000D1195U850-4F0-1E-UDD-G4

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 328.0  | 3.4       |
| 10°-20°   | 759.0  | 7.9       |
| 20°-30°   | 870.9  | 9.1       |
| 30°-40°   | 858.4  | 9.0       |
| 40°-50°   | 757.0  | 7.9       |
| 50°-60°   | 582.4  | 6.1       |
| 60°-70°   | 382.9  | 4.0       |
| 70°-80°   | 185.9  | 1.9       |
| 80°-90°   | 50.4   | 0.5       |
| 90°-100°  | 345.4  | 3.6       |
| 100°-110° | 1011.2 | 10.6      |
| 110°-120° | 987.5  | 10.3      |
| 120°-130° | 786.4  | 8.2       |
| 130°-140° | 620.5  | 6.5       |
| 140°-150° | 462.9  | 4.8       |
| 150°-160° | 322.7  | 3.4       |
| 160°-170° | 189.6  | 2.0       |
| 170°-180° | 61.7   | 0.6       |
| 0°-30°    | 1957.9 | 20.5      |
| 0°-40°    | 2816.3 | 29.5      |
| 0°-60°    | 4155.7 | 43.5      |
| 0°-90°    | 4774.9 | 49.9      |
| 90°-120°  | 2344.1 | 24.5      |
| 90°-150°  | 4213.9 | 44.1      |
| 90°-180°  | 4788.0 | 50.1      |
| 0°-180°   | 9562.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0°   | 3599 | 3599 | 3599 | 3599 | 3599 |      |
| 5°   | 4257 | 4121 | 3608 | 2916 | 2708 | 389  |
| 15°  | 2575 | 3480 | 3444 | 1852 | 1538 | 727  |
| 25°  | 1281 | 1916 | 3072 | 1302 | 1169 | 605  |
| 35°  | 925  | 1168 | 2519 | 1022 | 907  | 577  |
| 45°  | 658  | 823  | 1819 | 765  | 671  | 511  |
| 55°  | 438  | 566  | 1130 | 531  | 419  | 393  |
| 65°  | 267  | 336  | 623  | 319  | 276  | 262  |
| 75°  | 117  | 142  | 282  | 147  | 121  | 125  |
| 85°  | 32   | 35   | 59   | 38   | 35   | 35   |
| 90°  | 37   | 32   | 3    | 32   | 37   | 22   |
| 95°  | 150  | 764  | 44   | 764  | 150  | 243  |
| 105° | 1639 | 1036 | 150  | 1036 | 1639 | 1635 |
| 115° | 1993 | 792  | 264  | 792  | 1993 | 1944 |
| 125° | 1572 | 740  | 367  | 740  | 1572 | 1423 |
| 135° | 1274 | 729  | 430  | 729  | 1274 | 988  |
| 145° | 996  | 720  | 491  | 720  | 996  | 632  |
| 155° | 826  | 697  | 558  | 697  | 826  | 385  |
| 165° | 720  | 667  | 610  | 667  | 720  | 206  |
| 175° | 648  | 640  | 635  | 640  | 648  | 63   |
| 180° | 636  | 636  | 636  | 636  | 636  |      |

TEST NUMBER: P831803

CATALOG NUMBER: S123RDIP-S1000D1195U850-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 |
| 2.5°   | 3988.3 | 3975.7 | 3963.2 | 3959.5 | 3955.8 | 3944.0 | 3932.2 | 3905.6 | 3879.1 | 3851.8 | 3824.5 |
| 5°     | 4256.8 | 4258.3 | 4259.7 | 4256.1 | 4252.4 | 4236.9 | 4221.4 | 4188.9 | 4156.5 | 4121.1 | 4085.6 |
| 7.5°   | 4174.2 | 4197.8 | 4221.4 | 4225.8 | 4230.2 | 4242.0 | 4253.8 | 4246.5 | 4239.1 | 4225.8 | 4212.5 |
| 10°    | 3812.7 | 3811.2 | 3809.7 | 3836.3 | 3862.8 | 3941.8 | 4020.7 | 4061.3 | 4101.9 | 4138.0 | 4174.2 |
| 12.5°  | 3222.5 | 3224.7 | 3226.9 | 3314.0 | 3401.0 | 3475.5 | 3550.0 | 3653.3 | 3756.6 | 3868.0 | 3979.4 |
| 15°    | 2574.7 | 2610.9 | 2647.0 | 2724.5 | 2802.0 | 2914.1 | 3026.2 | 3164.9 | 3303.6 | 3480.0 | 3656.3 |
| 17.5°  | 2114.4 | 2129.9 | 2145.4 | 2219.9 | 2294.4 | 2400.6 | 2506.9 | 2664.0 | 2821.1 | 3048.4 | 3275.6 |
| 20°    | 1742.6 | 1756.6 | 1770.6 | 1824.4 | 1878.3 | 1980.1 | 2081.9 | 2231.7 | 2381.4 | 2606.5 | 2831.5 |
| 22.5°  | 1454.8 | 1482.1 | 1509.4 | 1545.6 | 1581.7 | 1655.5 | 1729.3 | 1882.0 | 2034.7 | 2239.8 | 2444.9 |
| 25°    | 1280.7 | 1293.3 | 1305.8 | 1336.8 | 1367.8 | 1438.6 | 1509.4 | 1610.5 | 1711.6 | 1915.9 | 2120.3 |
| 27.5°  | 1162.7 | 1166.4 | 1170.1 | 1192.9 | 1215.8 | 1261.5 | 1307.3 | 1401.0 | 1494.7 | 1662.9 | 1831.1 |
| 30°    | 1065.3 | 1071.9 | 1078.6 | 1096.3 | 1114.0 | 1147.2 | 1180.4 | 1246.8 | 1313.2 | 1463.7 | 1614.2 |
| 32.5°  | 990.1  | 993.7  | 997.4  | 1012.2 | 1026.9 | 1051.3 | 1075.6 | 1128.0 | 1180.4 | 1295.5 | 1410.6 |
| 35°    | 925.1  | 925.9  | 926.6  | 937.7  | 948.7  | 972.4  | 996.0  | 1039.5 | 1083.0 | 1167.9 | 1252.7 |
| 37.5°  | 851.4  | 856.5  | 861.7  | 869.8  | 877.9  | 898.6  | 919.2  | 954.6  | 990.1  | 1060.1 | 1130.2 |
| 40°    | 789.4  | 793.8  | 798.2  | 807.8  | 817.4  | 833.7  | 849.9  | 882.3  | 914.8  | 975.3  | 1035.8 |
| 42.5°  | 727.4  | 730.4  | 733.3  | 742.9  | 752.5  | 772.4  | 792.3  | 818.2  | 844.0  | 894.1  | 944.3  |
| 45°    | 658.1  | 665.4  | 672.8  | 683.2  | 693.5  | 710.4  | 727.4  | 754.0  | 780.5  | 823.3  | 866.1  |
| 47.5°  | 600.5  | 604.2  | 607.9  | 616.8  | 625.6  | 646.3  | 666.9  | 690.5  | 714.1  | 754.0  | 793.8  |
| 50°    | 543.0  | 544.5  | 545.9  | 554.0  | 562.2  | 580.6  | 599.1  | 626.3  | 653.6  | 690.5  | 727.4  |
| 52.5°  | 488.4  | 492.1  | 495.8  | 503.9  | 512.0  | 524.5  | 537.1  | 565.1  | 593.1  | 629.3  | 665.4  |
| 55°    | 438.2  | 440.4  | 442.6  | 448.5  | 454.5  | 469.2  | 484.0  | 508.3  | 532.7  | 565.9  | 599.1  |
| 57.5°  | 391.0  | 394.0  | 396.9  | 401.3  | 405.8  | 419.0  | 432.3  | 453.7  | 475.1  | 508.3  | 541.5  |
| 60°    | 342.3  | 346.0  | 349.7  | 354.9  | 360.0  | 370.3  | 380.7  | 399.9  | 419.0  | 448.5  | 478.1  |
| 62.5°  | 306.9  | 307.6  | 308.4  | 312.8  | 317.2  | 324.6  | 332.0  | 347.5  | 363.0  | 392.5  | 422.0  |
| 65°    | 267.1  | 269.3  | 271.5  | 273.7  | 275.9  | 281.8  | 287.7  | 301.0  | 314.3  | 336.4  | 358.5  |
| 67.5°  | 225.8  | 228.0  | 230.2  | 233.9  | 237.6  | 242.7  | 247.9  | 256.7  | 265.6  | 286.2  | 306.9  |
| 70°    | 175.6  | 175.6  | 175.6  | 181.5  | 187.4  | 196.2  | 205.1  | 211.7  | 218.4  | 235.3  | 252.3  |
| 72.5°  | 143.1  | 143.9  | 144.6  | 145.3  | 146.1  | 151.2  | 156.4  | 167.5  | 178.5  | 188.9  | 199.2  |
| 75°    | 116.6  | 117.3  | 118.0  | 118.8  | 119.5  | 121.0  | 122.5  | 126.2  | 129.8  | 141.6  | 153.5  |
| 77.5°  | 93.0   | 93.7   | 94.4   | 95.2   | 95.9   | 97.4   | 98.9   | 100.3  | 101.8  | 106.2  | 110.7  |
| 80°    | 70.8   | 71.6   | 72.3   | 73.0   | 73.8   | 74.5   | 75.3   | 76.7   | 78.2   | 80.4   | 82.6   |
| 82.5°  | 51.6   | 51.6   | 51.6   | 51.6   | 51.6   | 53.1   | 54.6   | 54.6   | 54.6   | 56.1   | 57.5   |
| 85°    | 32.5   | 32.5   | 32.5   | 33.2   | 33.9   | 33.9   | 33.9   | 34.7   | 35.4   | 35.4   | 35.4   |
| 87.5°  | 14.8   | 14.0   | 13.3   | 14.0   | 14.8   | 14.8   | 14.8   | 15.5   | 16.2   | 16.2   | 16.2   |
| 90°    | 37.4   | 38.7   | 37.4   | 36.1   | 37.4   | 34.8   | 33.5   | 32.2   | 30.9   | 32.2   | 28.3   |
| 92.5°  | 68.3   | 70.9   | 69.6   | 74.7   | 77.3   | 86.3   | 99.2   | 127.6  | 179.1  | 239.7  | 265.4  |
| 95°    | 149.5  | 154.6  | 163.6  | 175.2  | 199.7  | 246.1  | 314.4  | 463.9  | 619.8  | 764.1  | 680.3  |
| 97.5°  | 306.7  | 320.8  | 351.8  | 400.7  | 487.0  | 633.9  | 804.0  | 1065.6 | 1215.0 | 1175.1 | 877.5  |
| 100°   | 807.9  | 806.6  | 856.8  | 950.9  | 1081.0 | 1264.0 | 1414.8 | 1519.1 | 1474.0 | 1220.2 | 824.6  |
| 102.5° | 1279.5 | 1316.8 | 1356.8 | 1426.4 | 1520.4 | 1619.6 | 1691.8 | 1669.9 | 1486.9 | 1136.4 | 747.3  |
| 105°   | 1639.0 | 1645.4 | 1686.6 | 1735.6 | 1794.9 | 1828.4 | 1803.9 | 1675.0 | 1405.7 | 1035.9 | 686.8  |
| 107.5° | 1873.5 | 1887.6 | 1904.4 | 1927.6 | 1935.3 | 1900.5 | 1800.0 | 1597.7 | 1289.8 | 947.0  | 643.0  |
| 110°   | 2007.5 | 2010.0 | 2012.6 | 2002.3 | 1966.2 | 1876.0 | 1713.7 | 1476.6 | 1181.5 | 873.6  | 619.8  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°   | 50°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 112.5° | 2034.5 | 2033.2 | 2020.4 | 1983.0 | 1909.5 | 1787.1 | 1600.3 | 1356.8 | 1087.5 | 824.6 | 606.9 |
| 115°   | 1993.3 | 1986.9 | 1961.1 | 1904.4 | 1807.8 | 1667.3 | 1477.9 | 1253.7 | 1015.3 | 792.4 | 605.6 |
| 117.5° | 1903.1 | 1894.1 | 1855.4 | 1792.3 | 1691.8 | 1546.2 | 1372.2 | 1173.8 | 967.7  | 770.5 | 606.9 |
| 120°   | 1784.6 | 1776.8 | 1745.9 | 1673.7 | 1572.0 | 1441.8 | 1287.2 | 1113.3 | 931.6  | 756.3 | 612.0 |
| 122.5° | 1673.7 | 1663.4 | 1628.7 | 1565.5 | 1477.9 | 1359.4 | 1218.9 | 1065.6 | 901.9  | 747.3 | 621.1 |
| 125°   | 1572.0 | 1562.9 | 1530.7 | 1474.0 | 1391.6 | 1288.5 | 1164.8 | 1024.3 | 877.5  | 739.6 | 630.1 |
| 127.5° | 1484.3 | 1476.6 | 1447.0 | 1398.0 | 1323.3 | 1227.9 | 1114.5 | 987.0  | 854.3  | 735.7 | 640.4 |
| 130°   | 1412.2 | 1401.9 | 1374.8 | 1328.4 | 1260.1 | 1172.5 | 1068.2 | 952.2  | 836.2  | 731.9 | 650.7 |
| 132.5° | 1341.3 | 1334.9 | 1311.7 | 1265.3 | 1202.2 | 1119.7 | 1024.3 | 920.0  | 819.5  | 730.6 | 658.4 |
| 135°   | 1274.3 | 1265.3 | 1242.1 | 1203.4 | 1140.3 | 1066.9 | 983.1  | 891.6  | 805.3  | 729.3 | 666.1 |
| 137.5° | 1203.4 | 1195.7 | 1176.4 | 1136.4 | 1082.3 | 1016.6 | 941.9  | 864.6  | 792.4  | 726.7 | 671.3 |
| 140°   | 1128.7 | 1130.0 | 1109.4 | 1073.3 | 1024.3 | 968.9  | 907.1  | 841.4  | 780.8  | 725.4 | 676.5 |
| 142.5° | 1059.1 | 1060.4 | 1042.4 | 1011.5 | 971.5  | 925.1  | 873.6  | 819.5  | 770.5  | 722.8 | 680.3 |
| 145°   | 996.0  | 993.4  | 983.1  | 956.1  | 923.8  | 886.5  | 845.2  | 802.7  | 761.5  | 720.3 | 681.6 |
| 147.5° | 941.9  | 940.6  | 930.3  | 911.0  | 885.2  | 858.1  | 823.3  | 788.6  | 752.5  | 716.4 | 681.6 |
| 150°   | 895.5  | 895.5  | 887.8  | 873.6  | 854.3  | 829.8  | 802.7  | 773.1  | 743.5  | 711.2 | 681.6 |
| 152.5° | 856.8  | 856.8  | 853.0  | 840.1  | 825.9  | 806.6  | 783.4  | 758.9  | 733.2  | 704.8 | 677.7 |
| 155°   | 825.9  | 824.6  | 822.1  | 811.7  | 800.2  | 784.7  | 765.4  | 744.7  | 722.8  | 697.1 | 675.2 |
| 157.5° | 796.3  | 796.3  | 793.7  | 786.0  | 775.7  | 762.8  | 747.3  | 729.3  | 711.2  | 690.6 | 671.3 |
| 160°   | 767.9  | 769.2  | 769.2  | 761.5  | 752.5  | 743.5  | 730.6  | 716.4  | 699.6  | 682.9 | 668.7 |
| 162.5° | 742.2  | 743.5  | 743.5  | 737.0  | 731.9  | 724.1  | 712.5  | 700.9  | 688.1  | 675.2 | 663.6 |
| 165°   | 720.3  | 720.3  | 721.6  | 716.4  | 711.2  | 704.8  | 695.8  | 688.1  | 677.7  | 667.4 | 658.4 |
| 167.5° | 698.4  | 698.4  | 699.6  | 695.8  | 693.2  | 688.1  | 682.9  | 676.5  | 667.4  | 659.7 | 653.3 |
| 170°   | 679.0  | 679.0  | 680.3  | 677.7  | 676.5  | 673.9  | 668.7  | 664.9  | 658.4  | 652.0 | 648.1 |
| 172.5° | 661.0  | 662.3  | 664.9  | 662.3  | 662.3  | 661.0  | 657.1  | 654.6  | 649.4  | 645.5 | 644.2 |
| 175°   | 648.1  | 649.4  | 650.7  | 649.4  | 649.4  | 649.4  | 646.8  | 645.5  | 643.0  | 640.4 | 640.4 |
| 177.5° | 639.1  | 639.1  | 641.7  | 640.4  | 641.7  | 641.7  | 640.4  | 639.1  | 637.8  | 636.5 | 637.8 |
| 180°   | 636.5  | 636.5  | 636.5  | 636.5  | 636.5  | 636.5  | 636.5  | 636.5  | 636.5  | 636.5 | 636.5 |

TEST NUMBER: P831803

CATALOG NUMBER: S123RDIP-S1000D1195U850-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    | 100°   | 105°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 |
| 2.5°   | 3820.8 | 3817.1 | 3781.7 | 3746.3 | 3711.6 | 3676.9 | 3651.1 | 3625.3 | 3581.8 | 3538.2 | 3510.9 |
| 5°     | 4057.6 | 4029.6 | 3973.5 | 3917.4 | 3833.3 | 3749.2 | 3678.4 | 3607.6 | 3517.6 | 3427.6 | 3352.3 |
| 7.5°   | 4189.7 | 4166.8 | 4098.9 | 4031.0 | 3919.6 | 3808.2 | 3697.6 | 3586.9 | 3454.1 | 3321.3 | 3207.7 |
| 10°    | 4193.4 | 4212.5 | 4156.5 | 4100.4 | 3975.0 | 3849.6 | 3699.1 | 3548.6 | 3370.0 | 3191.5 | 3044.7 |
| 12.5°  | 4062.0 | 4144.7 | 4132.9 | 4121.1 | 3993.4 | 3865.8 | 3682.8 | 3499.9 | 3280.8 | 3061.6 | 2877.9 |
| 15°    | 3816.4 | 3976.5 | 4023.7 | 4070.9 | 3965.4 | 3859.9 | 3651.8 | 3443.8 | 3186.3 | 2928.9 | 2717.9 |
| 17.5°  | 3499.9 | 3724.1 | 3848.8 | 3973.5 | 3896.8 | 3820.1 | 3592.1 | 3364.1 | 3074.2 | 2784.3 | 2554.8 |
| 20°    | 3125.1 | 3418.7 | 3614.2 | 3809.7 | 3781.7 | 3753.7 | 3518.3 | 3283.0 | 2970.2 | 2657.4 | 2408.7 |
| 22.5°  | 2754.7 | 3064.6 | 3334.6 | 3604.6 | 3633.4 | 3662.2 | 3424.6 | 3187.1 | 2844.8 | 2502.4 | 2249.4 |
| 25°    | 2435.3 | 2750.3 | 3072.0 | 3393.6 | 3458.6 | 3523.5 | 3297.7 | 3072.0 | 2717.1 | 2362.3 | 2110.7 |
| 27.5°  | 2130.6 | 2430.1 | 2784.3 | 3138.4 | 3256.4 | 3374.5 | 3167.9 | 2961.3 | 2591.7 | 2222.1 | 1971.3 |
| 30°    | 1882.0 | 2149.8 | 2511.3 | 2872.8 | 3037.3 | 3201.8 | 3012.2 | 2822.6 | 2456.0 | 2089.3 | 1843.6 |
| 32.5°  | 1650.3 | 1890.1 | 2253.1 | 2616.0 | 2807.1 | 2998.2 | 2834.4 | 2670.6 | 2318.0 | 1965.4 | 1722.6 |
| 35°    | 1467.4 | 1682.1 | 2020.7 | 2359.3 | 2573.3 | 2787.2 | 2652.9 | 2518.7 | 2174.1 | 1829.6 | 1600.2 |
| 37.5°  | 1310.2 | 1490.2 | 1808.2 | 2126.2 | 2353.4 | 2580.6 | 2468.5 | 2356.4 | 2032.5 | 1708.6 | 1491.7 |
| 40°    | 1180.4 | 1325.0 | 1620.8 | 1916.7 | 2139.5 | 2362.3 | 2266.4 | 2170.5 | 1880.5 | 1590.6 | 1387.7 |
| 42.5°  | 1069.0 | 1193.7 | 1459.3 | 1724.9 | 1929.2 | 2133.6 | 2070.1 | 2006.7 | 1744.0 | 1481.4 | 1293.3 |
| 45°    | 970.9  | 1075.6 | 1309.5 | 1543.4 | 1731.5 | 1919.6 | 1869.4 | 1819.3 | 1592.8 | 1366.3 | 1193.7 |
| 47.5°  | 883.8  | 973.8  | 1182.6 | 1391.4 | 1560.3 | 1729.3 | 1682.8 | 1636.3 | 1448.9 | 1261.5 | 1104.4 |
| 50°    | 804.1  | 880.9  | 1055.0 | 1229.1 | 1381.1 | 1533.0 | 1494.7 | 1456.3 | 1301.4 | 1146.5 | 1010.7 |
| 52.5°  | 728.9  | 792.3  | 948.7  | 1105.1 | 1227.6 | 1350.1 | 1320.6 | 1291.1 | 1171.5 | 1052.0 | 928.8  |
| 55°    | 657.3  | 715.6  | 847.7  | 979.7  | 1084.5 | 1189.2 | 1159.7 | 1130.2 | 1037.3 | 944.3  | 835.9  |
| 57.5°  | 592.4  | 643.3  | 750.3  | 857.3  | 940.6  | 1024.0 | 1010.0 | 996.0  | 918.5  | 841.0  | 751.8  |
| 60°    | 523.8  | 569.5  | 661.8  | 754.0  | 821.1  | 888.2  | 872.0  | 855.8  | 800.5  | 745.1  | 668.4  |
| 62.5°  | 462.6  | 503.1  | 576.9  | 650.7  | 705.3  | 759.9  | 748.1  | 736.3  | 694.2  | 652.2  | 588.7  |
| 65°    | 398.4  | 438.2  | 498.0  | 557.7  | 600.5  | 643.3  | 633.0  | 622.7  | 590.9  | 559.2  | 508.3  |
| 67.5°  | 340.1  | 373.3  | 424.9  | 476.6  | 505.4  | 534.1  | 528.2  | 522.3  | 498.0  | 473.6  | 433.8  |
| 70°    | 281.1  | 309.9  | 352.6  | 395.4  | 415.4  | 435.3  | 437.5  | 439.7  | 417.6  | 395.4  | 365.9  |
| 72.5°  | 222.1  | 244.9  | 284.8  | 324.6  | 340.1  | 355.6  | 354.9  | 354.1  | 340.8  | 327.6  | 301.0  |
| 75°    | 170.4  | 187.4  | 218.4  | 249.4  | 262.6  | 275.9  | 278.9  | 281.8  | 269.3  | 256.7  | 242.0  |
| 77.5°  | 122.5  | 134.3  | 157.9  | 181.5  | 196.2  | 211.0  | 212.5  | 213.9  | 208.0  | 202.1  | 188.1  |
| 80°    | 86.3   | 90.0   | 104.8  | 119.5  | 135.0  | 150.5  | 152.7  | 154.9  | 149.0  | 143.1  | 134.3  |
| 82.5°  | 59.8   | 62.0   | 67.1   | 72.3   | 84.8   | 97.4   | 100.3  | 103.3  | 100.3  | 97.4   | 87.8   |
| 85°    | 36.1   | 36.9   | 39.1   | 41.3   | 47.2   | 53.1   | 56.1   | 59.0   | 57.5   | 56.1   | 50.9   |
| 87.5°  | 16.2   | 16.2   | 17.0   | 17.7   | 19.2   | 20.7   | 24.3   | 28.0   | 25.8   | 23.6   | 21.4   |
| 90°    | 24.5   | 20.6   | 16.8   | 14.2   | 11.6   | 7.7    | 5.2    | 2.6    | 5.2    | 7.7    | 11.6   |
| 92.5°  | 198.4  | 130.1  | 88.9   | 65.7   | 52.8   | 41.2   | 28.3   | 19.3   | 28.3   | 41.2   | 52.8   |
| 95°    | 469.0  | 277.0  | 167.5  | 117.3  | 83.8   | 61.8   | 47.7   | 43.8   | 47.7   | 61.8   | 83.8   |
| 97.5°  | 521.8  | 298.9  | 190.7  | 135.3  | 101.8  | 82.5   | 70.9   | 69.6   | 70.9   | 82.5   | 101.8  |
| 100°   | 485.8  | 295.1  | 204.9  | 154.6  | 123.7  | 105.7  | 96.6   | 95.3   | 96.6   | 105.7  | 123.7  |
| 102.5° | 454.8  | 300.2  | 221.6  | 176.5  | 149.5  | 132.7  | 125.0  | 122.4  | 125.0  | 132.7  | 149.5  |
| 105°   | 443.2  | 310.5  | 240.9  | 201.0  | 176.5  | 161.1  | 153.3  | 149.5  | 153.3  | 161.1  | 176.5  |
| 107.5° | 440.7  | 327.3  | 265.4  | 228.1  | 204.9  | 189.4  | 181.7  | 177.8  | 181.7  | 189.4  | 204.9  |
| 110°   | 447.1  | 349.2  | 291.2  | 255.1  | 233.2  | 219.0  | 212.6  | 208.7  | 212.6  | 219.0  | 233.2  |

TEST NUMBER: P831803

CATALOG NUMBER: S123RDIP-S1000D1195U850-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   | 100°  | 105°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 460.0 | 371.1 | 318.3 | 283.5 | 261.6 | 247.4 | 240.9 | 237.1 | 240.9 | 247.4 | 261.6 |
| 115°   | 474.2 | 395.6 | 346.6 | 311.8 | 289.9 | 277.0 | 269.3 | 264.1 | 269.3 | 277.0 | 289.9 |
| 117.5° | 492.2 | 421.3 | 372.4 | 340.2 | 315.7 | 304.1 | 297.6 | 291.2 | 297.6 | 304.1 | 315.7 |
| 120°   | 512.8 | 445.8 | 399.4 | 367.2 | 342.7 | 329.9 | 323.4 | 319.5 | 323.4 | 329.9 | 342.7 |
| 122.5° | 532.1 | 471.6 | 426.5 | 391.7 | 368.5 | 354.3 | 347.9 | 344.0 | 347.9 | 354.3 | 368.5 |
| 125°   | 552.8 | 496.1 | 451.0 | 416.2 | 391.7 | 377.5 | 369.8 | 367.2 | 369.8 | 377.5 | 391.7 |
| 127.5° | 569.5 | 518.0 | 474.2 | 439.4 | 412.3 | 398.1 | 389.1 | 385.3 | 389.1 | 398.1 | 412.3 |
| 130°   | 586.3 | 537.3 | 494.8 | 460.0 | 432.9 | 417.5 | 405.9 | 402.0 | 405.9 | 417.5 | 432.9 |
| 132.5° | 601.7 | 554.1 | 512.8 | 479.3 | 452.3 | 432.9 | 420.0 | 414.9 | 420.0 | 432.9 | 452.3 |
| 135°   | 614.6 | 570.8 | 530.9 | 496.1 | 469.0 | 449.7 | 435.5 | 430.4 | 435.5 | 449.7 | 469.0 |
| 137.5° | 624.9 | 582.4 | 543.7 | 511.5 | 484.5 | 463.9 | 449.7 | 444.5 | 449.7 | 463.9 | 484.5 |
| 140°   | 632.6 | 594.0 | 556.6 | 524.4 | 498.6 | 478.0 | 465.1 | 458.7 | 465.1 | 478.0 | 498.6 |
| 142.5° | 640.4 | 603.0 | 566.9 | 537.3 | 511.5 | 493.5 | 479.3 | 474.2 | 479.3 | 493.5 | 511.5 |
| 145°   | 645.5 | 610.7 | 577.2 | 547.6 | 525.7 | 506.4 | 494.8 | 490.9 | 494.8 | 506.4 | 525.7 |
| 147.5° | 649.4 | 617.2 | 586.3 | 560.5 | 538.6 | 521.8 | 510.2 | 507.7 | 510.2 | 521.8 | 538.6 |
| 150°   | 650.7 | 623.6 | 594.0 | 570.8 | 552.8 | 536.0 | 525.7 | 524.4 | 525.7 | 536.0 | 552.8 |
| 152.5° | 653.3 | 627.5 | 603.0 | 581.1 | 565.6 | 551.5 | 541.2 | 541.2 | 541.2 | 551.5 | 565.6 |
| 155°   | 653.3 | 632.6 | 610.7 | 592.7 | 578.5 | 565.6 | 557.9 | 557.9 | 557.9 | 565.6 | 578.5 |
| 157.5° | 654.6 | 635.2 | 617.2 | 603.0 | 590.1 | 578.5 | 572.1 | 570.8 | 572.1 | 578.5 | 590.1 |
| 160°   | 654.6 | 639.1 | 623.6 | 610.7 | 601.7 | 591.4 | 586.3 | 586.3 | 586.3 | 591.4 | 601.7 |
| 162.5° | 653.3 | 640.4 | 627.5 | 617.2 | 609.5 | 601.7 | 597.9 | 597.9 | 597.9 | 601.7 | 609.5 |
| 165°   | 650.7 | 641.7 | 631.4 | 622.3 | 617.2 | 610.7 | 608.2 | 609.5 | 608.2 | 610.7 | 617.2 |
| 167.5° | 649.4 | 641.7 | 633.9 | 627.5 | 623.6 | 618.5 | 617.2 | 618.5 | 617.2 | 618.5 | 623.6 |
| 170°   | 645.5 | 640.4 | 633.9 | 631.4 | 628.8 | 624.9 | 623.6 | 626.2 | 623.6 | 624.9 | 628.8 |
| 172.5° | 644.2 | 640.4 | 635.2 | 633.9 | 632.6 | 630.1 | 630.1 | 631.4 | 630.1 | 630.1 | 632.6 |
| 175°   | 641.7 | 639.1 | 636.5 | 635.2 | 635.2 | 632.6 | 633.9 | 635.2 | 633.9 | 632.6 | 635.2 |
| 177.5° | 640.4 | 637.8 | 636.5 | 636.5 | 636.5 | 635.2 | 636.5 | 637.8 | 636.5 | 635.2 | 636.5 |
| 180°   | 636.5 | 636.5 | 636.5 | 636.5 | 636.5 | 636.5 | 636.5 | 636.5 | 636.5 | 636.5 | 636.5 |

TEST NUMBER: P831803

CATALOG NUMBER: S123RDIP-S1000D1195U850-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

|        | 110°   | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   | 150°   | 155°   | 160°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 | 3598.7 |
| 2.5°   | 3483.6 | 3441.6 | 3399.5 | 3369.3 | 3339.0 | 3301.4 | 3263.8 | 3262.3 | 3260.8 | 3232.8 | 3204.8 |
| 5°     | 3277.1 | 3204.0 | 3131.0 | 3059.4 | 2987.9 | 2916.3 | 2844.8 | 2828.5 | 2812.3 | 2787.9 | 2763.6 |
| 7.5°   | 3094.1 | 2977.5 | 2861.0 | 2769.5 | 2678.0 | 2606.5 | 2534.9 | 2486.2 | 2437.5 | 2399.9 | 2362.3 |
| 10°    | 2897.9 | 2753.3 | 2608.7 | 2498.0 | 2387.3 | 2309.9 | 2232.4 | 2176.4 | 2120.3 | 2093.7 | 2067.2 |
| 12.5°  | 2694.3 | 2537.1 | 2380.0 | 2271.5 | 2163.1 | 2070.1 | 1977.2 | 1926.3 | 1875.4 | 1838.5 | 1801.6 |
| 15°    | 2506.9 | 2337.9 | 2169.0 | 2053.9 | 1938.8 | 1851.7 | 1764.7 | 1713.8 | 1662.9 | 1626.0 | 1589.1 |
| 17.5°  | 2325.4 | 2155.0 | 1984.5 | 1868.0 | 1751.4 | 1672.5 | 1593.5 | 1544.1 | 1494.7 | 1471.8 | 1448.9 |
| 20°    | 2160.1 | 1988.2 | 1816.3 | 1706.4 | 1596.5 | 1519.0 | 1441.6 | 1415.0 | 1388.4 | 1367.0 | 1345.6 |
| 22.5°  | 1996.3 | 1831.1 | 1665.8 | 1560.3 | 1454.8 | 1398.8 | 1342.7 | 1321.3 | 1299.9 | 1283.7 | 1267.4 |
| 25°    | 1859.1 | 1694.6 | 1530.1 | 1437.9 | 1345.6 | 1302.1 | 1258.6 | 1244.6 | 1230.6 | 1214.3 | 1198.1 |
| 27.5°  | 1720.4 | 1564.0 | 1407.6 | 1333.8 | 1260.1 | 1224.7 | 1189.2 | 1171.5 | 1153.8 | 1140.6 | 1127.3 |
| 30°    | 1598.0 | 1453.4 | 1308.8 | 1247.5 | 1186.3 | 1155.3 | 1124.3 | 1105.1 | 1086.0 | 1073.4 | 1060.9 |
| 32.5°  | 1479.9 | 1351.6 | 1223.2 | 1170.8 | 1118.4 | 1088.2 | 1057.9 | 1039.5 | 1021.0 | 1006.3 | 991.5  |
| 35°    | 1370.7 | 1259.3 | 1147.9 | 1100.0 | 1052.0 | 1021.8 | 991.5  | 973.1  | 954.6  | 939.9  | 925.1  |
| 37.5°  | 1274.8 | 1173.8 | 1072.7 | 1027.7 | 982.7  | 956.1  | 929.6  | 910.4  | 891.2  | 875.7  | 860.2  |
| 40°    | 1184.8 | 1095.6 | 1006.3 | 962.8  | 919.2  | 890.5  | 861.7  | 844.7  | 827.8  | 813.7  | 799.7  |
| 42.5°  | 1105.1 | 1023.3 | 941.4  | 898.6  | 855.8  | 828.5  | 801.2  | 781.3  | 761.4  | 753.2  | 745.1  |
| 45°    | 1021.0 | 948.7  | 876.4  | 835.1  | 793.8  | 765.0  | 736.3  | 719.3  | 702.3  | 695.0  | 687.6  |
| 47.5°  | 947.3  | 880.1  | 813.0  | 772.4  | 731.8  | 706.0  | 680.2  | 666.9  | 653.6  | 643.3  | 633.0  |
| 50°    | 875.0  | 810.0  | 745.1  | 706.0  | 666.9  | 644.8  | 622.7  | 606.4  | 590.2  | 582.8  | 575.4  |
| 52.5°  | 805.6  | 746.6  | 687.6  | 647.7  | 607.9  | 586.5  | 565.1  | 551.1  | 537.1  | 521.6  | 506.1  |
| 55°    | 727.4  | 675.8  | 624.1  | 588.7  | 553.3  | 531.2  | 509.0  | 492.8  | 476.6  | 460.4  | 444.1  |
| 57.5°  | 662.5  | 611.6  | 560.7  | 529.0  | 497.2  | 475.8  | 454.5  | 436.7  | 419.0  | 405.8  | 392.5  |
| 60°    | 591.7  | 547.4  | 503.1  | 472.2  | 441.2  | 420.5  | 399.9  | 382.9  | 365.9  | 359.3  | 352.6  |
| 62.5°  | 525.3  | 484.0  | 442.6  | 415.4  | 388.1  | 368.1  | 348.2  | 337.2  | 326.1  | 321.7  | 317.2  |
| 65°    | 457.4  | 422.0  | 386.6  | 361.5  | 336.4  | 319.4  | 302.5  | 297.3  | 292.1  | 288.5  | 284.8  |
| 67.5°  | 394.0  | 363.7  | 333.5  | 311.3  | 289.2  | 277.4  | 265.6  | 259.7  | 253.8  | 249.4  | 244.9  |
| 70°    | 336.4  | 309.9  | 283.3  | 264.1  | 244.9  | 233.9  | 222.8  | 217.6  | 212.5  | 204.4  | 196.2  |
| 72.5°  | 274.4  | 253.8  | 233.1  | 218.4  | 203.6  | 194.0  | 184.4  | 174.1  | 163.8  | 156.4  | 149.0  |
| 75°    | 227.2  | 206.6  | 185.9  | 171.9  | 157.9  | 146.8  | 135.7  | 132.1  | 128.4  | 126.2  | 123.9  |
| 77.5°  | 174.1  | 156.4  | 138.7  | 127.6  | 116.6  | 111.4  | 106.2  | 104.0  | 101.8  | 101.1  | 100.3  |
| 80°    | 125.4  | 110.7  | 95.9   | 90.0   | 84.1   | 82.6   | 81.2   | 79.7   | 78.2   | 77.5   | 76.7   |
| 82.5°  | 78.2   | 70.8   | 63.4   | 62.0   | 60.5   | 59.8   | 59.0   | 58.3   | 57.5   | 56.8   | 56.1   |
| 85°    | 45.7   | 42.8   | 39.8   | 39.1   | 38.4   | 37.6   | 36.9   | 36.9   | 36.9   | 36.9   | 36.9   |
| 87.5°  | 19.2   | 19.2   | 19.2   | 19.2   | 19.2   | 19.2   | 19.2   | 19.2   | 19.2   | 18.4   | 17.7   |
| 90°    | 14.2   | 16.8   | 20.6   | 24.5   | 28.3   | 32.2   | 30.9   | 32.2   | 33.5   | 34.8   | 37.4   |
| 92.5°  | 65.7   | 88.9   | 130.1  | 198.4  | 265.4  | 239.7  | 179.1  | 127.6  | 99.2   | 86.3   | 77.3   |
| 95°    | 117.3  | 167.5  | 277.0  | 469.0  | 680.3  | 764.1  | 619.8  | 463.9  | 314.4  | 246.1  | 199.7  |
| 97.5°  | 135.3  | 190.7  | 298.9  | 521.8  | 877.5  | 1175.1 | 1215.0 | 1065.6 | 804.0  | 633.9  | 487.0  |
| 100°   | 154.6  | 204.9  | 295.1  | 485.8  | 824.6  | 1220.2 | 1474.0 | 1519.1 | 1414.8 | 1264.0 | 1081.0 |
| 102.5° | 176.5  | 221.6  | 300.2  | 454.8  | 747.3  | 1136.4 | 1486.9 | 1669.9 | 1691.8 | 1619.6 | 1520.4 |
| 105°   | 201.0  | 240.9  | 310.5  | 443.2  | 686.8  | 1035.9 | 1405.7 | 1675.0 | 1803.9 | 1828.4 | 1794.9 |
| 107.5° | 228.1  | 265.4  | 327.3  | 440.7  | 643.0  | 947.0  | 1289.8 | 1597.7 | 1800.0 | 1900.5 | 1935.3 |
| 110°   | 255.1  | 291.2  | 349.2  | 447.1  | 619.8  | 873.6  | 1181.5 | 1476.6 | 1713.7 | 1876.0 | 1966.2 |

TEST NUMBER: P831803

CATALOG NUMBER: S123RDIP-S1000D1195U850-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

|        | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°   | 145°   | 150°   | 155°   | 160°   |
|--------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| 112.5° | 283.5 | 318.3 | 371.1 | 460.0 | 606.9 | 824.6 | 1087.5 | 1356.8 | 1600.3 | 1787.1 | 1909.5 |
| 115°   | 311.8 | 346.6 | 395.6 | 474.2 | 605.6 | 792.4 | 1015.3 | 1253.7 | 1477.9 | 1667.3 | 1807.8 |
| 117.5° | 340.2 | 372.4 | 421.3 | 492.2 | 606.9 | 770.5 | 967.7  | 1173.8 | 1372.2 | 1546.2 | 1691.8 |
| 120°   | 367.2 | 399.4 | 445.8 | 512.8 | 612.0 | 756.3 | 931.6  | 1113.3 | 1287.2 | 1441.8 | 1572.0 |
| 122.5° | 391.7 | 426.5 | 471.6 | 532.1 | 621.1 | 747.3 | 901.9  | 1065.6 | 1218.9 | 1359.4 | 1477.9 |
| 125°   | 416.2 | 451.0 | 496.1 | 552.8 | 630.1 | 739.6 | 877.5  | 1024.3 | 1164.8 | 1288.5 | 1391.6 |
| 127.5° | 439.4 | 474.2 | 518.0 | 569.5 | 640.4 | 735.7 | 854.3  | 987.0  | 1114.5 | 1227.9 | 1323.3 |
| 130°   | 460.0 | 494.8 | 537.3 | 586.3 | 650.7 | 731.9 | 836.2  | 952.2  | 1068.2 | 1172.5 | 1260.1 |
| 132.5° | 479.3 | 512.8 | 554.1 | 601.7 | 658.4 | 730.6 | 819.5  | 920.0  | 1024.3 | 1119.7 | 1202.2 |
| 135°   | 496.1 | 530.9 | 570.8 | 614.6 | 666.1 | 729.3 | 805.3  | 891.6  | 983.1  | 1066.9 | 1140.3 |
| 137.5° | 511.5 | 543.7 | 582.4 | 624.9 | 671.3 | 726.7 | 792.4  | 864.6  | 941.9  | 1016.6 | 1082.3 |
| 140°   | 524.4 | 556.6 | 594.0 | 632.6 | 676.5 | 725.4 | 780.8  | 841.4  | 907.1  | 968.9  | 1024.3 |
| 142.5° | 537.3 | 566.9 | 603.0 | 640.4 | 680.3 | 722.8 | 770.5  | 819.5  | 873.6  | 925.1  | 971.5  |
| 145°   | 547.6 | 577.2 | 610.7 | 645.5 | 681.6 | 720.3 | 761.5  | 802.7  | 845.2  | 886.5  | 923.8  |
| 147.5° | 560.5 | 586.3 | 617.2 | 649.4 | 681.6 | 716.4 | 752.5  | 788.6  | 823.3  | 858.1  | 885.2  |
| 150°   | 570.8 | 594.0 | 623.6 | 650.7 | 681.6 | 711.2 | 743.5  | 773.1  | 802.7  | 829.8  | 854.3  |
| 152.5° | 581.1 | 603.0 | 627.5 | 653.3 | 677.7 | 704.8 | 733.2  | 758.9  | 783.4  | 806.6  | 825.9  |
| 155°   | 592.7 | 610.7 | 632.6 | 653.3 | 675.2 | 697.1 | 722.8  | 744.7  | 765.4  | 784.7  | 800.2  |
| 157.5° | 603.0 | 617.2 | 635.2 | 654.6 | 671.3 | 690.6 | 711.2  | 729.3  | 747.3  | 762.8  | 775.7  |
| 160°   | 610.7 | 623.6 | 639.1 | 654.6 | 668.7 | 682.9 | 699.6  | 716.4  | 730.6  | 743.5  | 752.5  |
| 162.5° | 617.2 | 627.5 | 640.4 | 653.3 | 663.6 | 675.2 | 688.1  | 700.9  | 712.5  | 724.1  | 731.9  |
| 165°   | 622.3 | 631.4 | 641.7 | 650.7 | 658.4 | 667.4 | 677.7  | 688.1  | 695.8  | 704.8  | 711.2  |
| 167.5° | 627.5 | 633.9 | 641.7 | 649.4 | 653.3 | 659.7 | 667.4  | 676.5  | 682.9  | 688.1  | 693.2  |
| 170°   | 631.4 | 633.9 | 640.4 | 645.5 | 648.1 | 652.0 | 658.4  | 664.9  | 668.7  | 673.9  | 676.5  |
| 172.5° | 633.9 | 635.2 | 640.4 | 644.2 | 644.2 | 645.5 | 649.4  | 654.6  | 657.1  | 661.0  | 662.3  |
| 175°   | 635.2 | 636.5 | 639.1 | 641.7 | 640.4 | 640.4 | 643.0  | 645.5  | 646.8  | 649.4  | 649.4  |
| 177.5° | 636.5 | 636.5 | 637.8 | 640.4 | 637.8 | 636.5 | 637.8  | 639.1  | 640.4  | 641.7  | 641.7  |
| 180°   | 636.5 | 636.5 | 636.5 | 636.5 | 636.5 | 636.5 | 636.5  | 636.5  | 636.5  | 636.5  | 636.5  |

TEST NUMBER: P831803

CATALOG NUMBER: S123RDIP-S1000D1195U850-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

|        | 165°   | 170°   | 175°   | 180°   |
|--------|--------|--------|--------|--------|
| 0°     | 3598.7 | 3598.7 | 3598.7 | 3598.7 |
| 2.5°   | 3197.4 | 3190.0 | 3187.1 | 3184.1 |
| 5°     | 2740.7 | 2717.9 | 2712.7 | 2707.5 |
| 7.5°   | 2352.7 | 2343.1 | 2311.4 | 2279.6 |
| 10°    | 2037.7 | 2008.1 | 1994.9 | 1981.6 |
| 12.5°  | 1774.3 | 1747.0 | 1742.6 | 1738.1 |
| 15°    | 1569.9 | 1550.7 | 1544.1 | 1537.5 |
| 17.5°  | 1435.7 | 1422.4 | 1414.3 | 1406.1 |
| 20°    | 1336.1 | 1326.5 | 1320.6 | 1314.7 |
| 22.5°  | 1260.1 | 1252.7 | 1248.3 | 1243.8 |
| 25°    | 1187.0 | 1176.0 | 1172.3 | 1168.6 |
| 27.5°  | 1117.7 | 1108.1 | 1104.4 | 1100.7 |
| 30°    | 1052.8 | 1044.6 | 1039.5 | 1034.3 |
| 32.5°  | 981.9  | 972.4  | 969.4  | 966.4  |
| 35°    | 919.2  | 913.3  | 910.4  | 907.4  |
| 37.5°  | 852.8  | 845.5  | 841.0  | 836.6  |
| 40°    | 796.0  | 792.3  | 790.1  | 787.9  |
| 42.5°  | 738.5  | 731.8  | 731.1  | 730.4  |
| 45°    | 680.9  | 674.3  | 672.8  | 671.3  |
| 47.5°  | 627.1  | 621.2  | 620.4  | 619.7  |
| 50°    | 567.3  | 559.2  | 553.3  | 547.4  |
| 52.5°  | 498.7  | 491.3  | 486.2  | 481.0  |
| 55°    | 436.0  | 427.9  | 423.5  | 419.0  |
| 57.5°  | 388.8  | 385.1  | 382.9  | 380.7  |
| 60°    | 350.4  | 348.2  | 346.7  | 345.3  |
| 62.5°  | 315.0  | 312.8  | 312.8  | 312.8  |
| 65°    | 282.6  | 280.3  | 278.1  | 275.9  |
| 67.5°  | 240.5  | 236.1  | 235.3  | 234.6  |
| 70°    | 189.6  | 183.0  | 182.2  | 181.5  |
| 72.5°  | 148.3  | 147.5  | 146.1  | 144.6  |
| 75°    | 122.5  | 121.0  | 121.0  | 121.0  |
| 77.5°  | 98.9   | 97.4   | 97.4   | 97.4   |
| 80°    | 76.0   | 75.3   | 76.0   | 76.7   |
| 82.5°  | 56.1   | 56.1   | 55.3   | 54.6   |
| 85°    | 36.1   | 35.4   | 35.4   | 35.4   |
| 87.5°  | 17.7   | 17.7   | 17.7   | 17.7   |
| 90°    | 36.1   | 37.4   | 38.7   | 37.4   |
| 92.5°  | 74.7   | 69.6   | 70.9   | 68.3   |
| 95°    | 175.2  | 163.6  | 154.6  | 149.5  |
| 97.5°  | 400.7  | 351.8  | 320.8  | 306.7  |
| 100°   | 950.9  | 856.8  | 806.6  | 807.9  |
| 102.5° | 1426.4 | 1356.8 | 1316.8 | 1279.5 |
| 105°   | 1735.6 | 1686.6 | 1645.4 | 1639.0 |
| 107.5° | 1927.6 | 1904.4 | 1887.6 | 1873.5 |
| 110°   | 2002.3 | 2012.6 | 2010.0 | 2007.5 |



TEST NUMBER: P831803

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**CANDELA DISTRIBUTION (continued):**

|        | 165°   | 170°   | 175°   | 180°   |
|--------|--------|--------|--------|--------|
| 112.5° | 1983.0 | 2020.4 | 2033.2 | 2034.5 |
| 115°   | 1904.4 | 1961.1 | 1986.9 | 1993.3 |
| 117.5° | 1792.3 | 1855.4 | 1894.1 | 1903.1 |
| 120°   | 1673.7 | 1745.9 | 1776.8 | 1784.6 |
| 122.5° | 1565.5 | 1628.7 | 1663.4 | 1673.7 |
| 125°   | 1474.0 | 1530.7 | 1562.9 | 1572.0 |
| 127.5° | 1398.0 | 1447.0 | 1476.6 | 1484.3 |
| 130°   | 1328.4 | 1374.8 | 1401.9 | 1412.2 |
| 132.5° | 1265.3 | 1311.7 | 1334.9 | 1341.3 |
| 135°   | 1203.4 | 1242.1 | 1265.3 | 1274.3 |
| 137.5° | 1136.4 | 1176.4 | 1195.7 | 1203.4 |
| 140°   | 1073.3 | 1109.4 | 1130.0 | 1128.7 |
| 142.5° | 1011.5 | 1042.4 | 1060.4 | 1059.1 |
| 145°   | 956.1  | 983.1  | 993.4  | 996.0  |
| 147.5° | 911.0  | 930.3  | 940.6  | 941.9  |
| 150°   | 873.6  | 887.8  | 895.5  | 895.5  |
| 152.5° | 840.1  | 853.0  | 856.8  | 856.8  |
| 155°   | 811.7  | 822.1  | 824.6  | 825.9  |
| 157.5° | 786.0  | 793.7  | 796.3  | 796.3  |
| 160°   | 761.5  | 769.2  | 769.2  | 767.9  |
| 162.5° | 737.0  | 743.5  | 743.5  | 742.2  |
| 165°   | 716.4  | 721.6  | 720.3  | 720.3  |
| 167.5° | 695.8  | 699.6  | 698.4  | 698.4  |
| 170°   | 677.7  | 680.3  | 679.0  | 679.0  |
| 172.5° | 662.3  | 664.9  | 662.3  | 661.0  |
| 175°   | 649.4  | 650.7  | 649.4  | 648.1  |
| 177.5° | 640.4  | 641.7  | 639.1  | 639.1  |
| 180°   | 636.5  | 636.5  | 636.5  | 636.5  |

TEST NUMBER: P831803

CATALOG NUMBER: S123RDIP-S1000D1195U850-4F0-1E-UDD-G4

**CIE UGR TABLE:**

| Reflectances:   |      |                  |       |       |       |       |                |       |       |       |       |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling         |      | 0.7              | 0.7   | 0.5   | 0.5   | 0.3   | 0.7            | 0.7   | 0.5   | 0.5   | 0.3   |
| Wall            |      | 0.5              | 0.3   | 0.5   | 0.3   | 0.3   | 0.5            | 0.3   | 0.5   | 0.3   | 0.3   |
| Reference plane |      | 0.2              | 0.2   | 0.2   | 0.2   | 0.2   | 0.2            | 0.2   | 0.2   | 0.2   | 0.2   |
| Room dimensions |      | Viewed crosswise |       |       |       |       | Viewed endwise |       |       |       |       |
| X=2H            | Y=2H | 13.44            | 14.25 | 14.41 | 15.23 | 16.50 | 18.11          | 18.92 | 19.08 | 19.89 | 21.17 |
|                 | 3H   | 14.66            | 15.38 | 15.64 | 16.37 | 17.67 | 19.61          | 20.33 | 20.59 | 21.31 | 22.61 |
|                 | 4H   | 15.04            | 15.73 | 16.04 | 16.71 | 18.02 | 20.09          | 20.78 | 21.09 | 21.76 | 23.07 |
|                 | 6H   | 15.32            | 15.95 | 16.33 | 16.95 | 18.26 | 20.40          | 21.03 | 21.41 | 22.03 | 23.34 |
|                 | 8H   | 15.41            | 16.01 | 16.42 | 17.02 | 18.33 | 20.48          | 21.08 | 21.49 | 22.09 | 23.40 |
|                 | 12H  | 15.46            | 16.03 | 16.48 | 17.03 | 18.37 | 20.51          | 21.08 | 21.53 | 22.08 | 23.42 |
| 4H              | 2H   | 14.16            | 14.85 | 15.16 | 15.83 | 17.14 | 18.10          | 18.78 | 19.10 | 19.77 | 21.08 |
|                 | 3H   | 15.53            | 16.10 | 16.54 | 17.12 | 18.44 | 19.76          | 20.32 | 20.76 | 21.34 | 22.66 |
|                 | 4H   | 15.99            | 16.50 | 17.00 | 17.51 | 18.86 | 20.36          | 20.88 | 21.38 | 21.89 | 23.23 |
|                 | 6H   | 16.35            | 16.80 | 17.38 | 17.83 | 19.17 | 20.80          | 21.24 | 21.83 | 22.28 | 23.62 |
|                 | 8H   | 16.48            | 16.89 | 17.50 | 17.92 | 19.27 | 20.93          | 21.34 | 21.96 | 22.37 | 23.73 |
|                 | 12H  | 16.55            | 16.93 | 17.60 | 17.97 | 19.33 | 20.99          | 21.36 | 22.04 | 22.41 | 23.77 |
| 8H              | 4H   | 16.30            | 16.71 | 17.33 | 17.74 | 19.09 | 20.33          | 20.74 | 21.35 | 21.77 | 23.12 |
|                 | 6H   | 16.76            | 17.10 | 17.81 | 18.17 | 19.52 | 20.82          | 21.16 | 21.87 | 22.23 | 23.59 |
|                 | 8H   | 16.96            | 17.25 | 18.01 | 18.31 | 19.68 | 21.01          | 21.31 | 22.07 | 22.36 | 23.74 |
|                 | 12H  | 17.09            | 17.36 | 18.16 | 18.41 | 19.82 | 21.12          | 21.39 | 22.19 | 22.44 | 23.85 |
| 12H             | 4H   | 16.31            | 16.68 | 17.35 | 17.72 | 19.08 | 20.28          | 20.65 | 21.32 | 21.69 | 23.05 |
|                 | 6H   | 16.82            | 17.12 | 17.88 | 18.17 | 19.55 | 20.80          | 21.10 | 21.86 | 22.15 | 23.52 |
|                 | 8H   | 17.04            | 17.30 | 18.10 | 18.35 | 19.76 | 20.99          | 21.25 | 22.05 | 22.30 | 23.72 |

END OF REPORT