

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: P831233

Luminaire Tested: S123DIP-S1165D1195U950-4F0-1E-UDD-G4

Issue Date: 05/03/2024

Test Information

Test Method: LM-79-2019
Report Number: P831233
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-905-1, G3-1807-864-17)
Test Lab: INNOVATION CENTER
Issue Date: 05/03/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-S1165D1195U950-4F0-1E-UDD-G4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, GRAZE OPTIC
UPLIGHT 1195 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: -

Summary

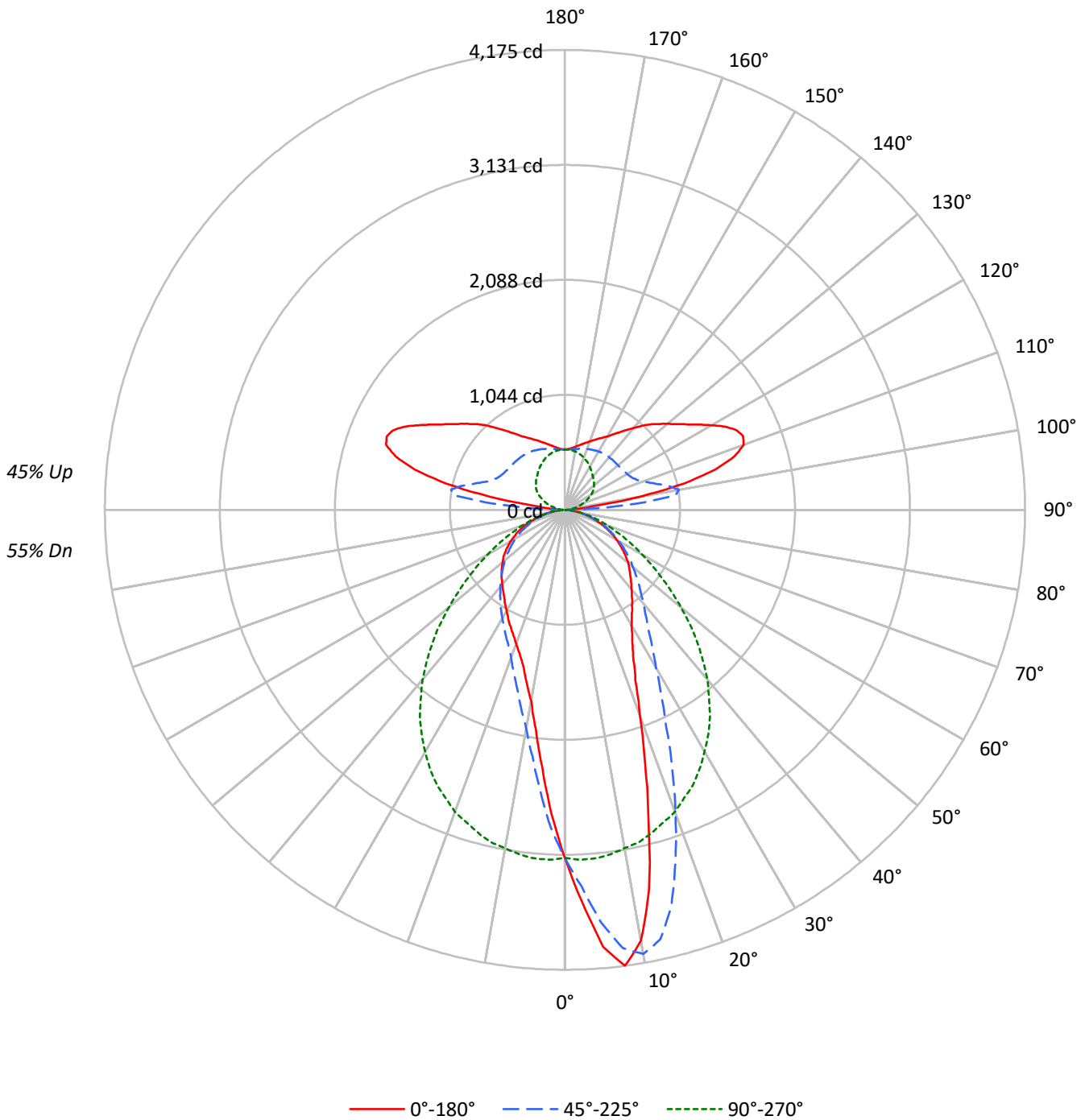
Lumens per Lamp: N/A
Luminaire Lumens: 9201.3 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Spacing Criteria (0/90/45): 0.65 / 1.19 / 0.89
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 73.2
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: P831233

CATALOG NUMBER: S123DIP-S1165D1195U950-4F0-1E-UDD-G4

Luminous Intensity Polar Plot





TEST NUMBER: P831233

CATALOG NUMBER: S123DIP-S1165D1195U950-4F0-1E-UDD-G4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|--|--|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 108 | 108 | 108 | 108 | 101 | 101 | 101 | 101 | 86 | 86 | 86 | 73 | 73 | 73 | 61 | 61 | 61 | 55 | | |
| 1 | 100 | 95 | 92 | 88 | 92 | 89 | 86 | 83 | 76 | 74 | 72 | 65 | 64 | 62 | 55 | 54 | 53 | 48 | | |
| 2 | 91 | 84 | 78 | 73 | 84 | 78 | 73 | 69 | 68 | 64 | 61 | 58 | 55 | 53 | 49 | 47 | 45 | 41 | | |
| 3 | 84 | 74 | 67 | 62 | 77 | 70 | 63 | 58 | 60 | 56 | 52 | 52 | 48 | 45 | 44 | 41 | 39 | 35 | | |
| 4 | 77 | 66 | 59 | 53 | 71 | 62 | 55 | 50 | 54 | 49 | 45 | 47 | 43 | 40 | 40 | 37 | 35 | 31 | | |
| 5 | 71 | 60 | 52 | 46 | 66 | 56 | 49 | 44 | 49 | 43 | 39 | 42 | 38 | 35 | 36 | 33 | 31 | 28 | | |
| 6 | 66 | 54 | 46 | 40 | 61 | 51 | 44 | 39 | 44 | 39 | 35 | 39 | 34 | 31 | 33 | 30 | 27 | 25 | | |
| 7 | 61 | 49 | 41 | 36 | 57 | 46 | 39 | 34 | 41 | 35 | 31 | 36 | 31 | 28 | 31 | 27 | 25 | 22 | | |
| 8 | 57 | 45 | 37 | 32 | 53 | 42 | 35 | 31 | 37 | 32 | 28 | 33 | 28 | 25 | 28 | 25 | 23 | 20 | | |
| 9 | 53 | 41 | 34 | 29 | 50 | 39 | 32 | 28 | 35 | 29 | 25 | 30 | 26 | 23 | 27 | 23 | 21 | 19 | | |
| 10 | 50 | 38 | 31 | 26 | 46 | 36 | 30 | 25 | 32 | 27 | 23 | 28 | 24 | 21 | 25 | 21 | 19 | 17 | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|-------|-------|-------|-------|-------|
| 0° | 34013 | 34013 | 34013 | 34013 | 34013 |
| 5° | 43015 | 40599 | 34317 | 27654 | 25412 |
| 10° | 43432 | 44746 | 34088 | 22045 | 19264 |
| 15° | 32712 | 41545 | 33857 | 18668 | 16291 |
| 20° | 22793 | 33617 | 33424 | 16325 | 14797 |
| 25° | 17380 | 25852 | 32687 | 15020 | 13879 |
| 30° | 15035 | 20539 | 31510 | 14097 | 13140 |
| 35° | 13950 | 17341 | 30154 | 13429 | 12620 |
| 40° | 13207 | 15556 | 28247 | 12795 | 12444 |
| 45° | 12767 | 14397 | 25825 | 12298 | 12365 |
| 50° | 12548 | 13480 | 22958 | 11848 | 12301 |
| 55° | 12080 | 12810 | 20142 | 11419 | 12356 |
| 60° | 11649 | 12090 | 17362 | 11016 | 12152 |
| 65° | 10942 | 11410 | 14976 | 10588 | 11915 |
| 70° | 10106 | 10543 | 12737 | 9876 | 11213 |
| 75° | 9145 | 9453 | 10917 | 9179 | 10243 |
| 80° | 7544 | 8269 | 8635 | 7996 | 8635 |
| 85° | 5978 | 6706 | 6336 | 6793 | 6879 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 80°
 Vertical Angle: 45°
 Luminance: 29486 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 298.7 | 3.2 |
| 10°-20° | 743.2 | 8.1 |
| 20°-30° | 880.0 | 9.6 |
| 30°-40° | 884.8 | 9.6 |
| 40°-50° | 811.8 | 8.8 |
| 50°-60° | 670.0 | 7.3 |
| 60°-70° | 474.0 | 5.2 |
| 70°-80° | 253.0 | 2.7 |
| 80°-90° | 67.2 | 0.7 |
| 90°-100° | 297.1 | 3.2 |
| 100°-110° | 869.9 | 9.5 |
| 110°-120° | 849.5 | 9.2 |
| 120°-130° | 676.5 | 7.4 |
| 130°-140° | 533.8 | 5.8 |
| 140°-150° | 398.2 | 4.3 |
| 150°-160° | 277.6 | 3.0 |
| 160°-170° | 163.1 | 1.8 |
| 170°-180° | 53.0 | 0.6 |
| 0°-30° | 1921.9 | 20.9 |
| 0°-40° | 2806.7 | 30.5 |
| 0°-60° | 4288.4 | 46.6 |
| 0°-90° | 5082.6 | 55.2 |
| 90°-120° | 2016.5 | 21.9 |
| 90°-150° | 3625.0 | 39.4 |
| 90°-180° | 4119.0 | 44.8 |
| 0°-180° | 9201.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 3160 | 3160 | 3160 | 3160 | 3160 | |
| 5° | 3981 | 3757 | 3176 | 2559 | 2352 | 379 |
| 15° | 2936 | 3728 | 3038 | 1675 | 1462 | 811 |
| 25° | 1463 | 2177 | 2752 | 1265 | 1169 | 691 |
| 35° | 1062 | 1320 | 2295 | 1022 | 960 | 667 |
| 45° | 839 | 946 | 1696 | 808 | 812 | 650 |
| 55° | 644 | 683 | 1073 | 608 | 658 | 576 |
| 65° | 430 | 448 | 588 | 416 | 468 | 427 |
| 75° | 220 | 227 | 262 | 221 | 246 | 231 |
| 85° | 48 | 54 | 51 | 55 | 56 | 54 |
| 90° | 32 | 28 | 2 | 28 | 32 | 20 |
| 95° | 129 | 657 | 38 | 657 | 129 | 209 |
| 105° | 1410 | 891 | 129 | 891 | 1410 | 1407 |
| 115° | 1715 | 682 | 227 | 682 | 1715 | 1672 |
| 125° | 1352 | 636 | 316 | 636 | 1352 | 1224 |
| 135° | 1096 | 627 | 370 | 627 | 1096 | 850 |
| 145° | 857 | 620 | 422 | 620 | 857 | 544 |
| 155° | 710 | 600 | 480 | 600 | 710 | 331 |
| 165° | 620 | 574 | 524 | 574 | 620 | 177 |
| 175° | 558 | 551 | 546 | 551 | 558 | 54 |
| 180° | 548 | 548 | 548 | 548 | 548 | |



TEST NUMBER: P831233

CATALOG NUMBER: S123DIP-S1165D1195U950-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 |
| 2.5° | 3561.6 | 3558.0 | 3554.3 | 3536.0 | 3517.7 | 3508.9 | 3500.1 | 3473.7 | 3447.3 | 3417.9 | 3388.6 |
| 5° | 3981.0 | 3991.3 | 4001.5 | 3989.8 | 3978.1 | 3942.2 | 3906.2 | 3858.6 | 3810.9 | 3757.4 | 3703.9 |
| 7.5° | 4174.6 | 4180.4 | 4186.3 | 4179.0 | 4171.6 | 4162.1 | 4152.6 | 4110.0 | 4067.5 | 4012.5 | 3957.5 |
| 10° | 3973.7 | 3986.9 | 4000.1 | 4028.7 | 4057.3 | 4089.5 | 4121.8 | 4115.9 | 4110.0 | 4093.9 | 4077.8 |
| 12.5° | 3532.3 | 3548.4 | 3564.6 | 3621.8 | 3679.0 | 3752.3 | 3825.6 | 3888.6 | 3951.7 | 3995.7 | 4039.7 |
| 15° | 2935.5 | 2980.3 | 3025.0 | 3077.0 | 3129.1 | 3236.9 | 3344.6 | 3477.3 | 3610.0 | 3728.1 | 3846.1 |
| 17.5° | 2417.9 | 2434.8 | 2451.7 | 2507.4 | 2563.1 | 2698.7 | 2834.4 | 2987.6 | 3140.8 | 3336.6 | 3532.3 |
| 20° | 1989.8 | 2005.2 | 2020.6 | 2093.9 | 2167.2 | 2273.5 | 2379.8 | 2552.1 | 2724.4 | 2934.8 | 3145.2 |
| 22.5° | 1671.6 | 1695.8 | 1720.0 | 1761.0 | 1802.1 | 1904.0 | 2005.9 | 2159.1 | 2312.4 | 2544.8 | 2777.2 |
| 25° | 1463.4 | 1481.0 | 1498.6 | 1523.5 | 1548.4 | 1629.8 | 1711.2 | 1837.3 | 1963.4 | 2176.7 | 2390.1 |
| 27.5° | 1321.1 | 1328.5 | 1335.8 | 1360.7 | 1385.7 | 1438.4 | 1491.2 | 1599.7 | 1708.2 | 1889.3 | 2070.4 |
| 30° | 1209.7 | 1214.8 | 1220.0 | 1242.0 | 1264.0 | 1299.9 | 1335.8 | 1414.2 | 1492.7 | 1652.5 | 1812.3 |
| 32.5° | 1132.0 | 1135.7 | 1139.3 | 1156.2 | 1173.0 | 1198.7 | 1224.4 | 1281.5 | 1338.7 | 1470.7 | 1602.7 |
| 35° | 1061.6 | 1063.8 | 1066.0 | 1078.5 | 1090.9 | 1110.0 | 1129.1 | 1172.3 | 1215.6 | 1319.7 | 1423.8 |
| 37.5° | 1000.0 | 1003.0 | 1005.9 | 1013.2 | 1020.5 | 1037.4 | 1054.3 | 1088.7 | 1123.2 | 1203.1 | 1283.0 |
| 40° | 939.9 | 945.0 | 950.2 | 955.3 | 960.4 | 974.4 | 988.3 | 1014.7 | 1041.1 | 1107.1 | 1173.0 |
| 42.5° | 888.6 | 893.7 | 898.8 | 901.0 | 903.2 | 911.3 | 919.4 | 943.6 | 967.8 | 1016.9 | 1066.0 |
| 45° | 838.7 | 840.9 | 843.1 | 845.3 | 847.5 | 854.1 | 860.7 | 882.0 | 903.2 | 945.8 | 988.3 |
| 47.5° | 793.3 | 793.3 | 793.3 | 794.7 | 796.2 | 802.1 | 807.9 | 823.3 | 838.7 | 871.7 | 904.7 |
| 50° | 749.3 | 749.3 | 749.3 | 747.1 | 744.9 | 748.5 | 752.2 | 763.9 | 775.7 | 805.0 | 834.3 |
| 52.5° | 696.5 | 696.5 | 696.5 | 697.2 | 698.0 | 698.0 | 698.0 | 708.2 | 718.5 | 744.9 | 771.3 |
| 55° | 643.7 | 646.6 | 649.6 | 647.4 | 645.2 | 646.6 | 648.1 | 654.7 | 661.3 | 682.6 | 703.8 |
| 57.5° | 590.9 | 592.4 | 593.9 | 593.1 | 592.4 | 593.1 | 593.9 | 599.7 | 605.6 | 621.7 | 637.8 |
| 60° | 541.1 | 541.1 | 541.1 | 539.6 | 538.1 | 539.6 | 541.1 | 544.0 | 546.9 | 561.6 | 576.3 |
| 62.5° | 485.3 | 486.1 | 486.8 | 487.5 | 488.3 | 486.8 | 485.3 | 489.0 | 492.7 | 503.7 | 514.7 |
| 65° | 429.6 | 430.4 | 431.1 | 433.3 | 435.5 | 434.0 | 432.6 | 436.2 | 439.9 | 448.0 | 456.0 |
| 67.5° | 379.8 | 378.3 | 376.8 | 377.6 | 378.3 | 380.5 | 382.7 | 383.4 | 384.2 | 393.0 | 401.8 |
| 70° | 321.1 | 322.6 | 324.1 | 323.3 | 322.6 | 323.3 | 324.1 | 326.3 | 328.5 | 335.0 | 341.6 |
| 72.5° | 268.3 | 269.1 | 269.8 | 269.8 | 269.8 | 271.3 | 272.7 | 274.9 | 277.1 | 280.8 | 284.5 |
| 75° | 219.9 | 219.9 | 219.9 | 221.4 | 222.9 | 223.6 | 224.3 | 224.3 | 224.3 | 227.3 | 230.2 |
| 77.5° | 167.2 | 170.8 | 174.5 | 173.8 | 173.0 | 174.5 | 176.0 | 178.2 | 180.4 | 181.8 | 183.3 |
| 80° | 121.7 | 121.7 | 121.7 | 122.4 | 123.2 | 125.4 | 127.6 | 129.0 | 130.5 | 133.4 | 136.4 |
| 82.5° | 77.7 | 78.4 | 79.2 | 81.4 | 83.6 | 85.0 | 86.5 | 88.7 | 90.9 | 90.9 | 90.9 |
| 85° | 48.4 | 46.9 | 45.5 | 46.9 | 48.4 | 49.9 | 51.3 | 52.1 | 52.8 | 54.3 | 55.7 |
| 87.5° | 23.5 | 23.5 | 23.5 | 23.5 | 23.5 | 24.2 | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 |
| 90° | 32.1 | 33.3 | 32.1 | 31.0 | 32.1 | 29.9 | 28.8 | 27.7 | 26.6 | 27.7 | 24.4 |
| 92.5° | 58.7 | 61.0 | 59.9 | 64.3 | 66.5 | 74.3 | 85.3 | 109.7 | 154.1 | 206.2 | 228.3 |
| 95° | 128.6 | 133.0 | 140.8 | 150.7 | 171.8 | 211.7 | 270.5 | 399.0 | 533.1 | 657.3 | 585.2 |
| 97.5° | 263.8 | 276.0 | 302.6 | 344.7 | 419.0 | 545.3 | 691.6 | 916.6 | 1045.2 | 1010.9 | 754.8 |
| 100° | 695.0 | 693.9 | 737.1 | 818.0 | 929.9 | 1087.3 | 1217.0 | 1306.8 | 1268.0 | 1049.7 | 709.4 |
| 102.5° | 1100.6 | 1132.8 | 1167.1 | 1227.0 | 1307.9 | 1393.3 | 1455.3 | 1436.5 | 1279.1 | 977.6 | 642.9 |
| 105° | 1409.9 | 1415.4 | 1450.9 | 1493.0 | 1544.0 | 1572.8 | 1551.8 | 1440.9 | 1209.3 | 891.2 | 590.8 |
| 107.5° | 1611.6 | 1623.8 | 1638.2 | 1658.2 | 1664.8 | 1634.9 | 1548.4 | 1374.4 | 1109.5 | 814.7 | 553.1 |
| 110° | 1726.9 | 1729.1 | 1731.3 | 1722.5 | 1691.4 | 1613.8 | 1474.2 | 1270.2 | 1016.4 | 751.5 | 533.1 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 112.5° | 1750.2 | 1749.1 | 1738.0 | 1705.8 | 1642.7 | 1537.4 | 1376.6 | 1167.1 | 935.5 | 709.4 | 522.1 |
| 115° | 1714.7 | 1709.2 | 1687.0 | 1638.2 | 1555.1 | 1434.3 | 1271.3 | 1078.5 | 873.4 | 681.7 | 520.9 |
| 117.5° | 1637.1 | 1629.4 | 1596.1 | 1541.8 | 1455.3 | 1330.1 | 1180.4 | 1009.8 | 832.4 | 662.8 | 522.1 |
| 120° | 1535.1 | 1528.5 | 1501.9 | 1439.8 | 1352.3 | 1240.3 | 1107.3 | 957.7 | 801.4 | 650.6 | 526.5 |
| 122.5° | 1439.8 | 1430.9 | 1401.0 | 1346.7 | 1271.3 | 1169.4 | 1048.5 | 916.6 | 775.9 | 642.9 | 534.3 |
| 125° | 1352.3 | 1344.5 | 1316.8 | 1268.0 | 1197.1 | 1108.4 | 1002.0 | 881.2 | 754.8 | 636.2 | 542.0 |
| 127.5° | 1276.9 | 1270.2 | 1244.7 | 1202.6 | 1138.3 | 1056.3 | 958.8 | 849.0 | 734.9 | 632.9 | 550.9 |
| 130° | 1214.8 | 1205.9 | 1182.7 | 1142.8 | 1084.0 | 1008.6 | 918.9 | 819.1 | 719.4 | 629.6 | 559.7 |
| 132.5° | 1153.8 | 1148.3 | 1128.4 | 1088.5 | 1034.1 | 963.2 | 881.2 | 791.4 | 704.9 | 628.5 | 566.4 |
| 135° | 1096.2 | 1088.5 | 1068.5 | 1035.2 | 980.9 | 917.8 | 845.7 | 767.0 | 692.8 | 627.4 | 573.0 |
| 137.5° | 1035.2 | 1028.6 | 1012.0 | 977.6 | 931.1 | 874.5 | 810.2 | 743.7 | 681.7 | 625.1 | 577.5 |
| 140° | 971.0 | 972.1 | 954.3 | 923.3 | 881.2 | 833.5 | 780.3 | 723.8 | 671.7 | 624.0 | 581.9 |
| 142.5° | 911.1 | 912.2 | 896.7 | 870.1 | 835.7 | 795.8 | 751.5 | 704.9 | 662.8 | 621.8 | 585.2 |
| 145° | 856.8 | 854.6 | 845.7 | 822.4 | 794.7 | 762.6 | 727.1 | 690.5 | 655.1 | 619.6 | 586.3 |
| 147.5° | 810.2 | 809.1 | 800.3 | 783.6 | 761.5 | 738.2 | 708.3 | 678.3 | 647.3 | 616.3 | 586.3 |
| 150° | 770.3 | 770.3 | 763.7 | 751.5 | 734.9 | 713.8 | 690.5 | 665.0 | 639.5 | 611.8 | 586.3 |
| 152.5° | 737.1 | 737.1 | 733.8 | 722.7 | 710.5 | 693.9 | 673.9 | 652.8 | 630.7 | 606.3 | 583.0 |
| 155° | 710.5 | 709.4 | 707.2 | 698.3 | 688.3 | 675.0 | 658.4 | 640.7 | 621.8 | 599.6 | 580.8 |
| 157.5° | 685.0 | 685.0 | 682.8 | 676.1 | 667.3 | 656.2 | 642.9 | 627.4 | 611.8 | 594.1 | 577.5 |
| 160° | 660.6 | 661.7 | 661.7 | 655.1 | 647.3 | 639.5 | 628.5 | 616.3 | 601.9 | 587.5 | 575.3 |
| 162.5° | 638.4 | 639.5 | 639.5 | 634.0 | 629.6 | 622.9 | 612.9 | 603.0 | 591.9 | 580.8 | 570.8 |
| 165° | 619.6 | 619.6 | 620.7 | 616.3 | 611.8 | 606.3 | 598.5 | 591.9 | 583.0 | 574.2 | 566.4 |
| 167.5° | 600.8 | 600.8 | 601.9 | 598.5 | 596.3 | 591.9 | 587.5 | 581.9 | 574.2 | 567.5 | 562.0 |
| 170° | 584.1 | 584.1 | 585.2 | 583.0 | 581.9 | 579.7 | 575.3 | 571.9 | 566.4 | 560.9 | 557.5 |
| 172.5° | 568.6 | 569.7 | 571.9 | 569.7 | 569.7 | 568.6 | 565.3 | 563.1 | 558.6 | 555.3 | 554.2 |
| 175° | 557.5 | 558.6 | 559.7 | 558.6 | 558.6 | 558.6 | 556.4 | 555.3 | 553.1 | 550.9 | 550.9 |
| 177.5° | 549.8 | 549.8 | 552.0 | 550.9 | 552.0 | 552.0 | 550.9 | 549.8 | 548.7 | 547.6 | 548.7 |
| 180° | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 |



TEST NUMBER: P831233

CATALOG NUMBER: S123DIP-S1165D1195U950-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 |
| 2.5° | 3379.8 | 3371.0 | 3338.8 | 3306.5 | 3269.9 | 3233.2 | 3206.1 | 3178.9 | 3138.6 | 3098.3 | 3065.3 |
| 5° | 3662.8 | 3621.8 | 3553.6 | 3485.4 | 3393.0 | 3300.6 | 3238.3 | 3176.0 | 3092.4 | 3008.9 | 2942.1 |
| 7.5° | 3887.2 | 3816.8 | 3721.5 | 3626.2 | 3505.2 | 3384.2 | 3269.9 | 3155.5 | 3027.9 | 2900.3 | 2796.2 |
| 10° | 4030.1 | 3982.5 | 3872.5 | 3762.5 | 3600.5 | 3438.5 | 3278.6 | 3118.8 | 2954.6 | 2790.4 | 2652.5 |
| 12.5° | 4044.1 | 4048.5 | 3947.3 | 3846.1 | 3662.8 | 3479.5 | 3285.2 | 3091.0 | 2884.2 | 2677.5 | 2516.9 |
| 15° | 3921.6 | 3997.1 | 3941.4 | 3885.7 | 3700.9 | 3516.2 | 3277.2 | 3038.2 | 2799.9 | 2561.6 | 2376.1 |
| 17.5° | 3694.3 | 3856.4 | 3864.4 | 3872.5 | 3687.7 | 3503.0 | 3238.3 | 2973.7 | 2703.9 | 2434.1 | 2239.0 |
| 20° | 3384.2 | 3623.2 | 3705.3 | 3787.5 | 3637.2 | 3486.9 | 3202.4 | 2917.9 | 2615.9 | 2313.8 | 2109.3 |
| 22.5° | 3067.5 | 3357.8 | 3508.1 | 3658.4 | 3547.0 | 3435.5 | 3132.8 | 2830.0 | 2511.0 | 2192.1 | 1984.6 |
| 25° | 2706.8 | 3023.5 | 3254.5 | 3485.4 | 3417.2 | 3349.0 | 3050.6 | 2752.2 | 2412.8 | 2073.4 | 1861.5 |
| 27.5° | 2392.3 | 2714.1 | 2992.7 | 3271.3 | 3256.7 | 3242.0 | 2945.8 | 2649.6 | 2302.1 | 1954.6 | 1750.0 |
| 30° | 2112.2 | 2412.1 | 2723.7 | 3035.2 | 3071.2 | 3107.1 | 2821.2 | 2535.2 | 2187.0 | 1838.7 | 1641.5 |
| 32.5° | 1864.4 | 2126.1 | 2460.5 | 2794.8 | 2865.2 | 2935.5 | 2677.5 | 2419.4 | 2074.8 | 1730.2 | 1540.3 |
| 35° | 1661.3 | 1898.9 | 2233.2 | 2567.5 | 2655.5 | 2743.4 | 2519.1 | 2294.8 | 1959.0 | 1623.2 | 1442.1 |
| 37.5° | 1481.7 | 1680.4 | 2006.6 | 2332.9 | 2440.7 | 2548.4 | 2347.5 | 2146.7 | 1832.1 | 1517.6 | 1351.2 |
| 40° | 1332.9 | 1492.7 | 1792.6 | 2092.4 | 2217.0 | 2341.7 | 2176.0 | 2010.3 | 1711.9 | 1413.5 | 1260.3 |
| 42.5° | 1208.2 | 1350.5 | 1622.5 | 1894.5 | 2014.0 | 2133.5 | 1993.4 | 1853.4 | 1588.0 | 1322.6 | 1182.6 |
| 45° | 1101.9 | 1215.6 | 1462.6 | 1709.7 | 1823.3 | 1937.0 | 1816.7 | 1696.5 | 1462.6 | 1228.8 | 1098.3 |
| 47.5° | 1002.2 | 1099.7 | 1310.9 | 1522.0 | 1623.2 | 1724.4 | 1630.5 | 1536.7 | 1338.7 | 1140.8 | 1022.7 |
| 50° | 912.8 | 991.2 | 1176.0 | 1360.7 | 1448.7 | 1536.7 | 1453.8 | 1371.0 | 1208.2 | 1045.5 | 942.8 |
| 52.5° | 835.1 | 898.8 | 1053.5 | 1208.2 | 1283.7 | 1359.3 | 1288.1 | 1217.0 | 1088.0 | 959.0 | 869.5 |
| 55° | 758.1 | 812.3 | 946.5 | 1080.7 | 1132.0 | 1183.3 | 1128.3 | 1073.3 | 969.2 | 865.1 | 789.6 |
| 57.5° | 686.2 | 734.6 | 844.6 | 954.6 | 994.2 | 1033.7 | 983.9 | 934.0 | 855.6 | 777.1 | 714.1 |
| 60° | 615.8 | 655.4 | 747.1 | 838.7 | 862.9 | 887.1 | 846.8 | 806.5 | 751.5 | 696.5 | 640.0 |
| 62.5° | 550.6 | 586.5 | 654.7 | 722.9 | 739.0 | 755.1 | 724.4 | 693.6 | 651.8 | 610.0 | 566.0 |
| 65° | 483.1 | 510.3 | 566.0 | 621.7 | 632.0 | 642.2 | 615.1 | 588.0 | 556.5 | 524.9 | 492.7 |
| 67.5° | 420.8 | 439.9 | 485.3 | 530.8 | 531.5 | 532.3 | 510.3 | 488.3 | 470.7 | 453.1 | 427.4 |
| 70° | 360.0 | 378.3 | 408.4 | 438.4 | 439.2 | 439.9 | 422.3 | 404.7 | 391.5 | 378.3 | 359.2 |
| 72.5° | 297.7 | 310.9 | 333.6 | 356.3 | 354.8 | 353.4 | 342.4 | 331.4 | 321.1 | 310.9 | 296.9 |
| 75° | 241.2 | 252.2 | 267.6 | 283.0 | 278.6 | 274.2 | 268.3 | 262.5 | 253.7 | 244.9 | 236.1 |
| 77.5° | 189.9 | 196.5 | 205.3 | 214.1 | 211.1 | 208.2 | 203.1 | 198.0 | 191.4 | 184.8 | 181.1 |
| 80° | 139.3 | 142.2 | 148.1 | 154.0 | 152.5 | 151.0 | 145.2 | 139.3 | 137.8 | 136.4 | 131.2 |
| 82.5° | 94.6 | 98.2 | 99.7 | 101.2 | 100.4 | 99.7 | 95.3 | 90.9 | 89.4 | 88.0 | 87.2 |
| 85° | 56.5 | 57.2 | 57.9 | 58.7 | 56.5 | 54.3 | 52.8 | 51.3 | 51.3 | 51.3 | 50.6 |
| 87.5° | 25.7 | 26.4 | 26.4 | 26.4 | 25.7 | 24.9 | 23.5 | 22.0 | 22.7 | 23.5 | 23.5 |
| 90° | 21.1 | 17.7 | 14.4 | 12.2 | 10.0 | 6.7 | 4.4 | 2.2 | 4.4 | 6.7 | 10.0 |
| 92.5° | 170.7 | 111.9 | 76.5 | 56.5 | 45.4 | 35.5 | 24.4 | 16.6 | 24.4 | 35.5 | 45.4 |
| 95° | 403.5 | 238.3 | 144.1 | 100.9 | 72.0 | 53.2 | 41.0 | 37.7 | 41.0 | 53.2 | 72.0 |
| 97.5° | 448.9 | 257.1 | 164.0 | 116.4 | 87.6 | 70.9 | 61.0 | 59.9 | 61.0 | 70.9 | 87.6 |
| 100° | 417.9 | 253.8 | 176.2 | 133.0 | 106.4 | 90.9 | 83.1 | 82.0 | 83.1 | 90.9 | 106.4 |
| 102.5° | 391.3 | 258.3 | 190.6 | 151.9 | 128.6 | 114.2 | 107.5 | 105.3 | 107.5 | 114.2 | 128.6 |
| 105° | 381.3 | 267.1 | 207.3 | 172.9 | 151.9 | 138.6 | 131.9 | 128.6 | 131.9 | 138.6 | 151.9 |
| 107.5° | 379.1 | 281.5 | 228.3 | 196.2 | 176.2 | 162.9 | 156.3 | 153.0 | 156.3 | 162.9 | 176.2 |
| 110° | 384.6 | 300.4 | 250.5 | 219.5 | 200.6 | 188.4 | 182.9 | 179.6 | 182.9 | 188.4 | 200.6 |



TEST NUMBER: P831233

CATALOG NUMBER: S123DIP-S1165D1195U950-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 395.7 | 319.2 | 273.8 | 243.8 | 225.0 | 212.8 | 207.3 | 203.9 | 207.3 | 212.8 | 225.0 |
| 115° | 407.9 | 340.3 | 298.2 | 268.2 | 249.4 | 238.3 | 231.7 | 227.2 | 231.7 | 238.3 | 249.4 |
| 117.5° | 423.4 | 362.4 | 320.3 | 292.6 | 271.6 | 261.6 | 256.0 | 250.5 | 256.0 | 261.6 | 271.6 |
| 120° | 441.1 | 383.5 | 343.6 | 315.9 | 294.8 | 283.8 | 278.2 | 274.9 | 278.2 | 283.8 | 294.8 |
| 122.5° | 457.8 | 405.7 | 366.9 | 337.0 | 317.0 | 304.8 | 299.3 | 295.9 | 299.3 | 304.8 | 317.0 |
| 125° | 475.5 | 426.7 | 387.9 | 358.0 | 337.0 | 324.8 | 318.1 | 315.9 | 318.1 | 324.8 | 337.0 |
| 127.5° | 489.9 | 445.6 | 407.9 | 378.0 | 354.7 | 342.5 | 334.7 | 331.4 | 334.7 | 342.5 | 354.7 |
| 130° | 504.3 | 462.2 | 425.6 | 395.7 | 372.4 | 359.1 | 349.1 | 345.8 | 349.1 | 359.1 | 372.4 |
| 132.5° | 517.6 | 476.6 | 441.1 | 412.3 | 389.0 | 372.4 | 361.3 | 356.9 | 361.3 | 372.4 | 389.0 |
| 135° | 528.7 | 491.0 | 456.7 | 426.7 | 403.5 | 386.8 | 374.6 | 370.2 | 374.6 | 386.8 | 403.5 |
| 137.5° | 537.6 | 501.0 | 467.7 | 440.0 | 416.8 | 399.0 | 386.8 | 382.4 | 386.8 | 399.0 | 416.8 |
| 140° | 544.2 | 511.0 | 478.8 | 451.1 | 429.0 | 411.2 | 400.1 | 394.6 | 400.1 | 411.2 | 429.0 |
| 142.5° | 550.9 | 518.7 | 487.7 | 462.2 | 440.0 | 424.5 | 412.3 | 407.9 | 412.3 | 424.5 | 440.0 |
| 145° | 555.3 | 525.4 | 496.6 | 471.1 | 452.2 | 435.6 | 425.6 | 422.3 | 425.6 | 435.6 | 452.2 |
| 147.5° | 558.6 | 530.9 | 504.3 | 482.2 | 463.3 | 448.9 | 438.9 | 436.7 | 438.9 | 448.9 | 463.3 |
| 150° | 559.7 | 536.5 | 511.0 | 491.0 | 475.5 | 461.1 | 452.2 | 451.1 | 452.2 | 461.1 | 475.5 |
| 152.5° | 562.0 | 539.8 | 518.7 | 499.9 | 486.6 | 474.4 | 465.5 | 465.5 | 465.5 | 474.4 | 486.6 |
| 155° | 562.0 | 544.2 | 525.4 | 509.9 | 497.7 | 486.6 | 479.9 | 479.9 | 479.9 | 486.6 | 497.7 |
| 157.5° | 563.1 | 546.4 | 530.9 | 518.7 | 507.6 | 497.7 | 492.1 | 491.0 | 492.1 | 497.7 | 507.6 |
| 160° | 563.1 | 549.8 | 536.5 | 525.4 | 517.6 | 508.8 | 504.3 | 504.3 | 504.3 | 508.8 | 517.6 |
| 162.5° | 562.0 | 550.9 | 539.8 | 530.9 | 524.3 | 517.6 | 514.3 | 514.3 | 514.3 | 517.6 | 524.3 |
| 165° | 559.7 | 552.0 | 543.1 | 535.4 | 530.9 | 525.4 | 523.2 | 524.3 | 523.2 | 525.4 | 530.9 |
| 167.5° | 558.6 | 552.0 | 545.3 | 539.8 | 536.5 | 532.0 | 530.9 | 532.0 | 530.9 | 532.0 | 536.5 |
| 170° | 555.3 | 550.9 | 545.3 | 543.1 | 540.9 | 537.6 | 536.5 | 538.7 | 536.5 | 537.6 | 540.9 |
| 172.5° | 554.2 | 550.9 | 546.4 | 545.3 | 544.2 | 542.0 | 542.0 | 543.1 | 542.0 | 542.0 | 544.2 |
| 175° | 552.0 | 549.8 | 547.6 | 546.4 | 546.4 | 544.2 | 545.3 | 546.4 | 545.3 | 544.2 | 546.4 |
| 177.5° | 550.9 | 548.7 | 547.6 | 547.6 | 547.6 | 546.4 | 547.6 | 548.7 | 547.6 | 546.4 | 547.6 |
| 180° | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 |



TEST NUMBER: P831233

CATALOG NUMBER: S123DIP-S1165D1195U950-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 | 3159.9 |
| 2.5° | 3032.3 | 3003.7 | 2975.1 | 2953.1 | 2931.1 | 2893.7 | 2856.4 | 2847.6 | 2838.8 | 2826.3 | 2813.8 |
| 5° | 2875.4 | 2805.0 | 2734.7 | 2671.6 | 2608.6 | 2559.4 | 2510.3 | 2478.0 | 2445.8 | 2422.3 | 2398.9 |
| 7.5° | 2692.1 | 2586.6 | 2481.0 | 2406.2 | 2331.4 | 2260.3 | 2189.2 | 2166.5 | 2143.7 | 2112.9 | 2082.1 |
| 10° | 2514.7 | 2398.1 | 2281.6 | 2184.1 | 2086.5 | 2016.9 | 1947.2 | 1919.4 | 1891.5 | 1852.7 | 1813.8 |
| 12.5° | 2356.3 | 2228.8 | 2101.2 | 2003.0 | 1904.7 | 1837.3 | 1769.8 | 1729.5 | 1689.2 | 1667.2 | 1645.2 |
| 15° | 2190.7 | 2054.3 | 1917.9 | 1827.0 | 1736.1 | 1675.2 | 1614.4 | 1579.2 | 1544.0 | 1522.8 | 1501.5 |
| 17.5° | 2044.0 | 1909.1 | 1774.2 | 1687.0 | 1599.7 | 1544.0 | 1488.3 | 1457.5 | 1426.7 | 1410.6 | 1394.5 |
| 20° | 1904.7 | 1772.8 | 1640.8 | 1555.7 | 1470.7 | 1425.2 | 1379.8 | 1360.0 | 1340.2 | 1327.0 | 1313.8 |
| 22.5° | 1777.2 | 1647.4 | 1517.6 | 1445.0 | 1372.5 | 1335.8 | 1299.1 | 1285.2 | 1271.3 | 1260.3 | 1249.3 |
| 25° | 1649.6 | 1533.8 | 1417.9 | 1356.3 | 1294.7 | 1264.7 | 1234.6 | 1220.7 | 1206.8 | 1195.8 | 1184.8 |
| 27.5° | 1545.5 | 1434.8 | 1324.1 | 1271.3 | 1218.5 | 1195.0 | 1171.6 | 1160.6 | 1149.6 | 1139.3 | 1129.1 |
| 30° | 1444.3 | 1345.3 | 1246.4 | 1200.9 | 1155.4 | 1134.2 | 1112.9 | 1101.9 | 1090.9 | 1081.4 | 1071.9 |
| 32.5° | 1350.5 | 1265.4 | 1180.4 | 1138.6 | 1096.8 | 1079.2 | 1061.6 | 1048.4 | 1035.2 | 1027.9 | 1020.5 |
| 35° | 1261.0 | 1184.8 | 1108.5 | 1074.1 | 1039.6 | 1022.0 | 1004.4 | 993.4 | 982.4 | 976.6 | 970.7 |
| 37.5° | 1184.8 | 1116.6 | 1048.4 | 1015.4 | 982.4 | 965.6 | 948.7 | 939.2 | 929.6 | 927.4 | 925.2 |
| 40° | 1107.1 | 1048.4 | 989.8 | 957.5 | 925.2 | 910.6 | 895.9 | 890.0 | 884.2 | 882.7 | 881.2 |
| 42.5° | 1042.5 | 985.4 | 928.2 | 898.8 | 869.5 | 857.1 | 844.6 | 841.7 | 838.7 | 840.9 | 843.1 |
| 45° | 967.8 | 920.1 | 872.4 | 845.3 | 818.2 | 807.9 | 797.7 | 795.5 | 793.3 | 797.7 | 802.1 |
| 47.5° | 904.7 | 860.7 | 816.7 | 791.1 | 765.4 | 758.1 | 750.7 | 750.0 | 749.3 | 755.1 | 761.0 |
| 50° | 840.2 | 797.7 | 755.1 | 734.6 | 714.1 | 707.5 | 700.9 | 703.1 | 705.3 | 714.8 | 724.4 |
| 52.5° | 780.1 | 740.5 | 700.9 | 681.8 | 662.8 | 658.4 | 654.0 | 659.1 | 664.2 | 674.5 | 684.8 |
| 55° | 714.1 | 678.2 | 642.2 | 627.6 | 612.9 | 608.5 | 604.1 | 614.4 | 624.6 | 634.2 | 643.7 |
| 57.5° | 651.0 | 619.5 | 588.0 | 574.8 | 561.6 | 560.9 | 560.1 | 569.7 | 579.2 | 589.5 | 599.7 |
| 60° | 583.6 | 557.2 | 530.8 | 520.5 | 510.3 | 511.7 | 513.2 | 524.2 | 535.2 | 543.3 | 551.3 |
| 62.5° | 522.0 | 500.0 | 478.0 | 468.5 | 459.0 | 462.6 | 466.3 | 477.3 | 488.3 | 497.8 | 507.3 |
| 65° | 460.4 | 442.1 | 423.8 | 417.2 | 410.6 | 415.7 | 420.8 | 430.4 | 439.9 | 446.5 | 453.1 |
| 67.5° | 401.8 | 386.4 | 371.0 | 365.8 | 360.7 | 365.8 | 371.0 | 380.5 | 390.0 | 396.6 | 403.2 |
| 70° | 340.2 | 327.7 | 315.3 | 311.6 | 307.9 | 313.8 | 319.7 | 327.7 | 335.8 | 342.4 | 349.0 |
| 72.5° | 283.0 | 273.5 | 263.9 | 263.2 | 262.5 | 267.6 | 272.7 | 280.8 | 288.9 | 293.3 | 297.7 |
| 75° | 227.3 | 222.1 | 217.0 | 216.3 | 215.5 | 220.7 | 225.8 | 230.2 | 234.6 | 238.3 | 241.9 |
| 77.5° | 177.4 | 173.0 | 168.6 | 169.4 | 170.1 | 173.8 | 177.4 | 181.8 | 186.2 | 188.4 | 190.6 |
| 80° | 126.1 | 124.6 | 123.2 | 124.6 | 126.1 | 129.0 | 132.0 | 134.9 | 137.8 | 139.3 | 140.8 |
| 82.5° | 86.5 | 85.0 | 83.6 | 85.8 | 88.0 | 90.2 | 92.4 | 94.6 | 96.8 | 97.5 | 98.2 |
| 85° | 49.9 | 52.1 | 54.3 | 54.3 | 54.3 | 55.0 | 55.7 | 56.5 | 57.2 | 56.5 | 55.7 |
| 87.5° | 23.5 | 24.2 | 24.9 | 24.9 | 24.9 | 25.7 | 26.4 | 26.4 | 26.4 | 25.7 | 24.9 |
| 90° | 12.2 | 14.4 | 17.7 | 21.1 | 24.4 | 27.7 | 26.6 | 27.7 | 28.8 | 29.9 | 32.1 |
| 92.5° | 56.5 | 76.5 | 111.9 | 170.7 | 228.3 | 206.2 | 154.1 | 109.7 | 85.3 | 74.3 | 66.5 |
| 95° | 100.9 | 144.1 | 238.3 | 403.5 | 585.2 | 657.3 | 533.1 | 399.0 | 270.5 | 211.7 | 171.8 |
| 97.5° | 116.4 | 164.0 | 257.1 | 448.9 | 754.8 | 1010.9 | 1045.2 | 916.6 | 691.6 | 545.3 | 419.0 |
| 100° | 133.0 | 176.2 | 253.8 | 417.9 | 709.4 | 1049.7 | 1268.0 | 1306.8 | 1217.0 | 1087.3 | 929.9 |
| 102.5° | 151.9 | 190.6 | 258.3 | 391.3 | 642.9 | 977.6 | 1279.1 | 1436.5 | 1455.3 | 1393.3 | 1307.9 |
| 105° | 172.9 | 207.3 | 267.1 | 381.3 | 590.8 | 891.2 | 1209.3 | 1440.9 | 1551.8 | 1572.8 | 1544.0 |
| 107.5° | 196.2 | 228.3 | 281.5 | 379.1 | 553.1 | 814.7 | 1109.5 | 1374.4 | 1548.4 | 1634.9 | 1664.8 |
| 110° | 219.5 | 250.5 | 300.4 | 384.6 | 533.1 | 751.5 | 1016.4 | 1270.2 | 1474.2 | 1613.8 | 1691.4 |



TEST NUMBER: P831233

CATALOG NUMBER: S123DIP-S1165D1195U950-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|--------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| 112.5° | 243.8 | 273.8 | 319.2 | 395.7 | 522.1 | 709.4 | 935.5 | 1167.1 | 1376.6 | 1537.4 | 1642.7 |
| 115° | 268.2 | 298.2 | 340.3 | 407.9 | 520.9 | 681.7 | 873.4 | 1078.5 | 1271.3 | 1434.3 | 1555.1 |
| 117.5° | 292.6 | 320.3 | 362.4 | 423.4 | 522.1 | 662.8 | 832.4 | 1009.8 | 1180.4 | 1330.1 | 1455.3 |
| 120° | 315.9 | 343.6 | 383.5 | 441.1 | 526.5 | 650.6 | 801.4 | 957.7 | 1107.3 | 1240.3 | 1352.3 |
| 122.5° | 337.0 | 366.9 | 405.7 | 457.8 | 534.3 | 642.9 | 775.9 | 916.6 | 1048.5 | 1169.4 | 1271.3 |
| 125° | 358.0 | 387.9 | 426.7 | 475.5 | 542.0 | 636.2 | 754.8 | 881.2 | 1002.0 | 1108.4 | 1197.1 |
| 127.5° | 378.0 | 407.9 | 445.6 | 489.9 | 550.9 | 632.9 | 734.9 | 849.0 | 958.8 | 1056.3 | 1138.3 |
| 130° | 395.7 | 425.6 | 462.2 | 504.3 | 559.7 | 629.6 | 719.4 | 819.1 | 918.9 | 1008.6 | 1084.0 |
| 132.5° | 412.3 | 441.1 | 476.6 | 517.6 | 566.4 | 628.5 | 704.9 | 791.4 | 881.2 | 963.2 | 1034.1 |
| 135° | 426.7 | 456.7 | 491.0 | 528.7 | 573.0 | 627.4 | 692.8 | 767.0 | 845.7 | 917.8 | 980.9 |
| 137.5° | 440.0 | 467.7 | 501.0 | 537.6 | 577.5 | 625.1 | 681.7 | 743.7 | 810.2 | 874.5 | 931.1 |
| 140° | 451.1 | 478.8 | 511.0 | 544.2 | 581.9 | 624.0 | 671.7 | 723.8 | 780.3 | 833.5 | 881.2 |
| 142.5° | 462.2 | 487.7 | 518.7 | 550.9 | 585.2 | 621.8 | 662.8 | 704.9 | 751.5 | 795.8 | 835.7 |
| 145° | 471.1 | 496.6 | 525.4 | 555.3 | 586.3 | 619.6 | 655.1 | 690.5 | 727.1 | 762.6 | 794.7 |
| 147.5° | 482.2 | 504.3 | 530.9 | 558.6 | 586.3 | 616.3 | 647.3 | 678.3 | 708.3 | 738.2 | 761.5 |
| 150° | 491.0 | 511.0 | 536.5 | 559.7 | 586.3 | 611.8 | 639.5 | 665.0 | 690.5 | 713.8 | 734.9 |
| 152.5° | 499.9 | 518.7 | 539.8 | 562.0 | 583.0 | 606.3 | 630.7 | 652.8 | 673.9 | 693.9 | 710.5 |
| 155° | 509.9 | 525.4 | 544.2 | 562.0 | 580.8 | 599.6 | 621.8 | 640.7 | 658.4 | 675.0 | 688.3 |
| 157.5° | 518.7 | 530.9 | 546.4 | 563.1 | 577.5 | 594.1 | 611.8 | 627.4 | 642.9 | 656.2 | 667.3 |
| 160° | 525.4 | 536.5 | 549.8 | 563.1 | 575.3 | 587.5 | 601.9 | 616.3 | 628.5 | 639.5 | 647.3 |
| 162.5° | 530.9 | 539.8 | 550.9 | 562.0 | 570.8 | 580.8 | 591.9 | 603.0 | 612.9 | 622.9 | 629.6 |
| 165° | 535.4 | 543.1 | 552.0 | 559.7 | 566.4 | 574.2 | 583.0 | 591.9 | 598.5 | 606.3 | 611.8 |
| 167.5° | 539.8 | 545.3 | 552.0 | 558.6 | 562.0 | 567.5 | 574.2 | 581.9 | 587.5 | 591.9 | 596.3 |
| 170° | 543.1 | 545.3 | 550.9 | 555.3 | 557.5 | 560.9 | 566.4 | 571.9 | 575.3 | 579.7 | 581.9 |
| 172.5° | 545.3 | 546.4 | 550.9 | 554.2 | 554.2 | 555.3 | 558.6 | 563.1 | 565.3 | 568.6 | 569.7 |
| 175° | 546.4 | 547.6 | 549.8 | 552.0 | 550.9 | 550.9 | 553.1 | 555.3 | 556.4 | 558.6 | 558.6 |
| 177.5° | 547.6 | 547.6 | 548.7 | 550.9 | 548.7 | 547.6 | 548.7 | 549.8 | 550.9 | 552.0 | 552.0 |
| 180° | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 | 547.6 |



TEST NUMBER: P831233

CATALOG NUMBER: S123DIP-S1165D1195U950-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|--------|--------|--------|--------|--------|
| 0° | 3159.9 | 3159.9 | 3159.9 | 3159.9 |
| 2.5° | 2808.7 | 2803.6 | 2783.0 | 2762.5 |
| 5° | 2381.3 | 2363.7 | 2357.8 | 2351.9 |
| 7.5° | 2080.7 | 2079.2 | 2048.4 | 2017.6 |
| 10° | 1816.0 | 1818.2 | 1790.4 | 1762.5 |
| 12.5° | 1626.9 | 1608.5 | 1606.3 | 1604.1 |
| 15° | 1484.6 | 1467.8 | 1464.8 | 1461.9 |
| 17.5° | 1384.2 | 1373.9 | 1371.0 | 1368.1 |
| 20° | 1307.9 | 1302.1 | 1296.9 | 1291.8 |
| 22.5° | 1242.0 | 1234.6 | 1230.2 | 1225.8 |
| 25° | 1178.2 | 1171.6 | 1170.1 | 1168.6 |
| 27.5° | 1121.0 | 1112.9 | 1112.9 | 1112.9 |
| 30° | 1066.7 | 1061.6 | 1059.4 | 1057.2 |
| 32.5° | 1016.1 | 1011.7 | 1011.7 | 1011.7 |
| 35° | 968.5 | 966.3 | 963.4 | 960.4 |
| 37.5° | 925.2 | 925.2 | 923.8 | 922.3 |
| 40° | 883.4 | 885.6 | 885.6 | 885.6 |
| 42.5° | 845.3 | 847.5 | 847.5 | 847.5 |
| 45° | 805.7 | 809.4 | 810.9 | 812.3 |
| 47.5° | 766.9 | 772.7 | 774.2 | 775.7 |
| 50° | 728.8 | 733.2 | 733.9 | 734.6 |
| 52.5° | 689.9 | 695.0 | 698.7 | 702.4 |
| 55° | 648.8 | 654.0 | 656.2 | 658.4 |
| 57.5° | 604.8 | 610.0 | 610.7 | 611.4 |
| 60° | 556.5 | 561.6 | 563.1 | 564.5 |
| 62.5° | 510.3 | 513.2 | 514.7 | 516.1 |
| 65° | 457.5 | 461.9 | 464.8 | 467.8 |
| 67.5° | 406.9 | 410.6 | 410.6 | 410.6 |
| 70° | 350.4 | 351.9 | 354.1 | 356.3 |
| 72.5° | 298.4 | 299.1 | 299.1 | 299.1 |
| 75° | 243.4 | 244.9 | 245.6 | 246.3 |
| 77.5° | 191.4 | 192.1 | 192.1 | 192.1 |
| 80° | 140.0 | 139.3 | 139.3 | 139.3 |
| 82.5° | 96.0 | 93.8 | 93.8 | 93.8 |
| 85° | 55.0 | 54.3 | 55.0 | 55.7 |
| 87.5° | 24.9 | 24.9 | 24.9 | 24.9 |
| 90° | 31.0 | 32.1 | 33.3 | 32.1 |
| 92.5° | 64.3 | 59.9 | 61.0 | 58.7 |
| 95° | 150.7 | 140.8 | 133.0 | 128.6 |
| 97.5° | 344.7 | 302.6 | 276.0 | 263.8 |
| 100° | 818.0 | 737.1 | 693.9 | 695.0 |
| 102.5° | 1227.0 | 1167.1 | 1132.8 | 1100.6 |
| 105° | 1493.0 | 1450.9 | 1415.4 | 1409.9 |
| 107.5° | 1658.2 | 1638.2 | 1623.8 | 1611.6 |
| 110° | 1722.5 | 1731.3 | 1729.1 | 1726.9 |



TEST NUMBER: P831233

CATALOG NUMBER: S123DIP-S1165D1195U950-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|--------|--------|--------|--------|--------|
| 112.5° | 1705.8 | 1738.0 | 1749.1 | 1750.2 |
| 115° | 1638.2 | 1687.0 | 1709.2 | 1714.7 |
| 117.5° | 1541.8 | 1596.1 | 1629.4 | 1637.1 |
| 120° | 1439.8 | 1501.9 | 1528.5 | 1535.1 |
| 122.5° | 1346.7 | 1401.0 | 1430.9 | 1439.8 |
| 125° | 1268.0 | 1316.8 | 1344.5 | 1352.3 |
| 127.5° | 1202.6 | 1244.7 | 1270.2 | 1276.9 |
| 130° | 1142.8 | 1182.7 | 1205.9 | 1214.8 |
| 132.5° | 1088.5 | 1128.4 | 1148.3 | 1153.8 |
| 135° | 1035.2 | 1068.5 | 1088.5 | 1096.2 |
| 137.5° | 977.6 | 1012.0 | 1028.6 | 1035.2 |
| 140° | 923.3 | 954.3 | 972.1 | 971.0 |
| 142.5° | 870.1 | 896.7 | 912.2 | 911.1 |
| 145° | 822.4 | 845.7 | 854.6 | 856.8 |
| 147.5° | 783.6 | 800.3 | 809.1 | 810.2 |
| 150° | 751.5 | 763.7 | 770.3 | 770.3 |
| 152.5° | 722.7 | 733.8 | 737.1 | 737.1 |
| 155° | 698.3 | 707.2 | 709.4 | 710.5 |
| 157.5° | 676.1 | 682.8 | 685.0 | 685.0 |
| 160° | 655.1 | 661.7 | 661.7 | 660.6 |
| 162.5° | 634.0 | 639.5 | 639.5 | 638.4 |
| 165° | 616.3 | 620.7 | 619.6 | 619.6 |
| 167.5° | 598.5 | 601.9 | 600.8 | 600.8 |
| 170° | 583.0 | 585.2 | 584.1 | 584.1 |
| 172.5° | 569.7 | 571.9 | 569.7 | 568.6 |
| 175° | 558.6 | 559.7 | 558.6 | 557.5 |
| 177.5° | 550.9 | 552.0 | 549.8 | 549.8 |
| 180° | 547.6 | 547.6 | 547.6 | 547.6 |



TEST NUMBER: P831233

CATALOG NUMBER: S123DIP-S1165D1195U950-4F0-1E-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 | 16.30 | 17.17 | 17.22 | 18.10 | 19.30 | 18.53 | 19.40 | 19.45 | 20.33 | 21.53 |
| | 3H | 17.95 | 18.72 | 18.88 | 19.66 | 20.89 | 19.96 | 20.74 | 20.89 | 21.68 | 22.90 |
| | 4H | 18.52 | 19.26 | 19.47 | 20.20 | 21.44 | 20.41 | 21.15 | 21.36 | 22.09 | 23.32 |
| | 6H | 18.89 | 19.57 | 19.85 | 20.52 | 21.77 | 20.69 | 21.36 | 21.64 | 22.32 | 23.56 |
| | 8H | 18.99 | 19.63 | 19.95 | 20.60 | 21.84 | 20.75 | 21.39 | 21.71 | 22.36 | 23.60 |
| | 12H | 19.04 | 19.65 | 20.00 | 20.61 | 21.88 | 20.77 | 21.38 | 21.74 | 22.34 | 23.61 |
| 4H | 2H | 16.87 | 17.61 | 17.82 | 18.55 | 19.79 | 18.70 | 19.43 | 19.65 | 20.38 | 21.61 |
| | 3H | 18.70 | 19.32 | 19.66 | 20.29 | 21.54 | 20.32 | 20.93 | 21.28 | 21.91 | 23.15 |
| | 4H | 19.40 | 19.96 | 20.37 | 20.93 | 22.20 | 20.90 | 21.46 | 21.87 | 22.43 | 23.70 |
| | 6H | 19.88 | 20.36 | 20.86 | 21.35 | 22.62 | 21.31 | 21.79 | 22.29 | 22.78 | 24.05 |
| | 8H | 20.01 | 20.46 | 21.00 | 21.45 | 22.73 | 21.42 | 21.87 | 22.40 | 22.86 | 24.14 |
| | 12H | 20.08 | 20.49 | 21.08 | 21.49 | 22.78 | 21.46 | 21.87 | 22.47 | 22.87 | 24.16 |
| 8H | 4H | 19.67 | 20.12 | 20.65 | 21.10 | 22.39 | 21.01 | 21.46 | 21.99 | 22.44 | 23.73 |
| | 6H | 20.26 | 20.63 | 21.27 | 21.66 | 22.94 | 21.51 | 21.88 | 22.52 | 22.91 | 24.19 |
| | 8H | 20.46 | 20.79 | 21.48 | 21.81 | 23.11 | 21.69 | 22.02 | 22.71 | 23.03 | 24.33 |
| | 12H | 20.59 | 20.88 | 21.61 | 21.89 | 23.23 | 21.79 | 22.08 | 22.81 | 23.09 | 24.44 |
| 12H | 4H | 19.67 | 20.07 | 20.67 | 21.08 | 22.36 | 20.98 | 21.39 | 21.99 | 22.39 | 23.68 |
| | 6H | 20.31 | 20.63 | 21.32 | 21.65 | 22.95 | 21.53 | 21.85 | 22.54 | 22.87 | 24.17 |
| | 8H | 20.54 | 20.83 | 21.56 | 21.84 | 23.18 | 21.73 | 22.01 | 22.75 | 23.02 | 24.37 |