

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: P831344

Luminaire Tested: S123DIP-S340D1195U830-4F0-1E-UDD-G4

Issue Date: 05/03/2024

Test Information

Test Method: LM-79-2019
Report Number: P831344
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-S340D1195U830-4F0-1E-UDD-G4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, GRAZE OPTIC
UPLIGHT 1195 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: -

Summary

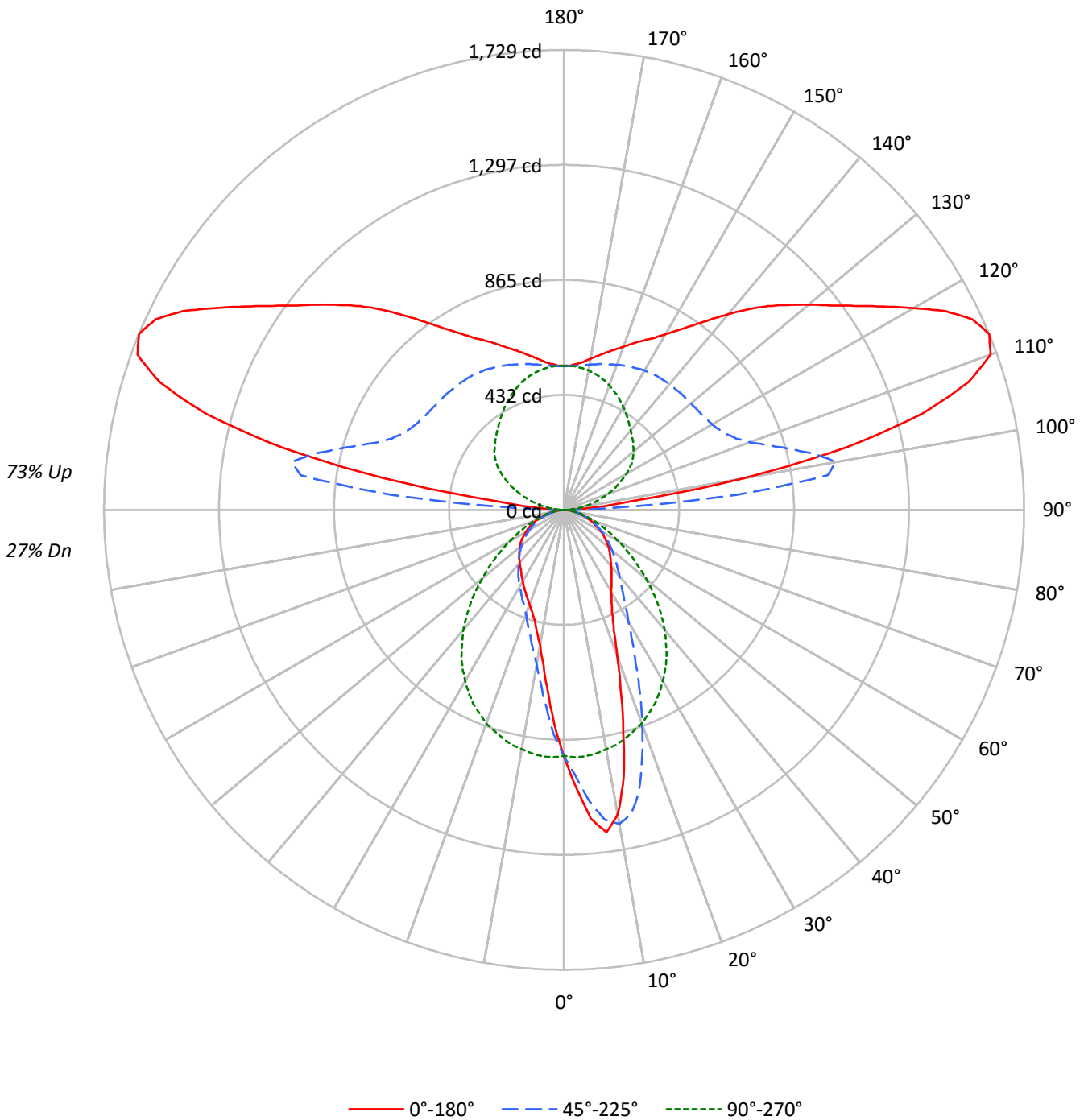
Lumens per Lamp: N/A
Luminaire Lumens: 5559.9 lumens
Efficiency: N/A
Efficacy: 128.1 lumens/watt
Spacing Criteria (0/90/45): 0.65 / 1.19 / 0.89
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.4
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: P831344

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-G4

Luminous Intensity Polar Plot





TEST NUMBER: P831344

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-G4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | 20 | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | | 10 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 102 | 102 | 102 | 102 | 91 | 91 | 91 | 91 | 70 | 70 | 70 | 52 | 52 | 52 | 35 | 35 | 35 | 27 | | | | |
| 1 | 93 | 89 | 85 | 82 | 83 | 79 | 76 | 74 | 62 | 60 | 58 | 46 | 45 | 44 | 31 | 30 | 30 | 23 | | | | |
| 2 | 85 | 78 | 72 | 67 | 75 | 70 | 65 | 61 | 55 | 51 | 49 | 41 | 39 | 37 | 28 | 27 | 26 | 20 | | | | |
| 3 | 77 | 69 | 62 | 56 | 69 | 62 | 56 | 51 | 48 | 44 | 41 | 36 | 34 | 31 | 25 | 23 | 22 | 17 | | | | |
| 4 | 71 | 61 | 53 | 48 | 63 | 55 | 48 | 44 | 43 | 39 | 35 | 32 | 30 | 27 | 22 | 21 | 19 | 15 | | | | |
| 5 | 65 | 54 | 47 | 41 | 58 | 49 | 42 | 37 | 39 | 34 | 31 | 29 | 26 | 24 | 20 | 19 | 17 | 13 | | | | |
| 6 | 60 | 49 | 41 | 36 | 54 | 44 | 37 | 33 | 35 | 30 | 27 | 27 | 23 | 21 | 19 | 17 | 15 | 12 | | | | |
| 7 | 56 | 44 | 36 | 31 | 50 | 40 | 33 | 29 | 32 | 27 | 24 | 24 | 21 | 19 | 17 | 15 | 14 | 11 | | | | |
| 8 | 52 | 40 | 33 | 28 | 46 | 36 | 30 | 25 | 29 | 24 | 21 | 22 | 19 | 17 | 16 | 14 | 12 | 10 | | | | |
| 9 | 48 | 36 | 29 | 25 | 43 | 33 | 27 | 23 | 27 | 22 | 19 | 20 | 17 | 15 | 15 | 13 | 11 | 9 | | | | |
| 10 | 45 | 33 | 27 | 22 | 40 | 30 | 24 | 20 | 24 | 20 | 17 | 19 | 16 | 14 | 14 | 12 | 10 | 8 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|-------|-------|-------|------|------|
| 0° | 9961 | 9961 | 9961 | 9961 | 9961 |
| 5° | 12598 | 11890 | 10050 | 8099 | 7443 |
| 10° | 12719 | 13105 | 9983 | 6456 | 5642 |
| 15° | 9580 | 12167 | 9916 | 5467 | 4771 |
| 20° | 6675 | 9845 | 9789 | 4781 | 4333 |
| 25° | 5090 | 7571 | 9573 | 4399 | 4065 |
| 30° | 4404 | 6016 | 9229 | 4129 | 3848 |
| 35° | 4085 | 5079 | 8832 | 3933 | 3696 |
| 40° | 3868 | 4555 | 8272 | 3747 | 3645 |
| 45° | 3739 | 4217 | 7563 | 3602 | 3621 |
| 50° | 3674 | 3949 | 6723 | 3470 | 3602 |
| 55° | 3537 | 3751 | 5898 | 3344 | 3618 |
| 60° | 3412 | 3541 | 5085 | 3227 | 3559 |
| 65° | 3204 | 3342 | 4386 | 3100 | 3489 |
| 70° | 2958 | 3087 | 3729 | 2892 | 3286 |
| 75° | 2678 | 2770 | 3198 | 2687 | 2999 |
| 80° | 2207 | 2424 | 2529 | 2343 | 2529 |
| 85° | 1754 | 1964 | 1853 | 1988 | 2013 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 80°
 Vertical Angle: 45°
 Luminance: 8636 cd/sqm



TEST NUMBER: P831344

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 87.5 | 1.6 |
| 10°-20° | 217.7 | 3.9 |
| 20°-30° | 257.7 | 4.6 |
| 30°-40° | 259.1 | 4.7 |
| 40°-50° | 237.7 | 4.3 |
| 50°-60° | 196.2 | 3.5 |
| 60°-70° | 138.8 | 2.5 |
| 70°-80° | 74.1 | 1.3 |
| 80°-90° | 21.8 | 0.4 |
| 90°-100° | 293.6 | 5.3 |
| 100°-110° | 859.4 | 15.5 |
| 110°-120° | 839.3 | 15.1 |
| 120°-130° | 668.4 | 12.0 |
| 130°-140° | 527.4 | 9.5 |
| 140°-150° | 393.4 | 7.1 |
| 150°-160° | 274.3 | 4.9 |
| 160°-170° | 161.1 | 2.9 |
| 170°-180° | 52.4 | 0.9 |
| 0°-30° | 562.9 | 10.1 |
| 0°-40° | 822.0 | 14.8 |
| 0°-60° | 1255.9 | 22.6 |
| 0°-90° | 1490.6 | 26.8 |
| 90°-120° | 1992.3 | 35.8 |
| 90°-150° | 3581.4 | 64.4 |
| 90°-180° | 4069.0 | 73.2 |
| 0°-180° | 5559.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|-----|------|------|------|
| 0° | 925 | 925 | 925 | 925 | 925 | |
| 5° | 1166 | 1100 | 930 | 750 | 689 | 111 |
| 15° | 860 | 1092 | 890 | 491 | 428 | 237 |
| 25° | 429 | 638 | 806 | 370 | 342 | 202 |
| 35° | 311 | 386 | 672 | 299 | 281 | 195 |
| 45° | 246 | 277 | 497 | 237 | 238 | 190 |
| 55° | 188 | 200 | 314 | 178 | 193 | 169 |
| 65° | 126 | 131 | 172 | 122 | 137 | 125 |
| 75° | 64 | 67 | 77 | 65 | 72 | 68 |
| 85° | 14 | 16 | 15 | 16 | 16 | 16 |
| 90° | 32 | 27 | 2 | 27 | 32 | 18 |
| 95° | 127 | 649 | 37 | 649 | 127 | 206 |
| 105° | 1393 | 880 | 127 | 880 | 1393 | 1390 |
| 115° | 1694 | 674 | 224 | 674 | 1694 | 1652 |
| 125° | 1336 | 629 | 312 | 629 | 1336 | 1209 |
| 135° | 1083 | 620 | 366 | 620 | 1083 | 840 |
| 145° | 846 | 612 | 417 | 612 | 846 | 538 |
| 155° | 702 | 592 | 474 | 592 | 702 | 327 |
| 165° | 612 | 567 | 518 | 567 | 612 | 175 |
| 175° | 551 | 544 | 540 | 544 | 551 | 53 |
| 180° | 541 | 541 | 541 | 541 | 541 | |



TEST NUMBER: P831344

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 |
| 2.5° | 1043.1 | 1042.0 | 1040.9 | 1035.6 | 1030.2 | 1027.6 | 1025.0 | 1017.3 | 1009.6 | 1001.0 | 992.4 |
| 5° | 1165.9 | 1168.9 | 1171.9 | 1168.5 | 1165.0 | 1154.5 | 1144.0 | 1130.0 | 1116.1 | 1100.4 | 1084.7 |
| 7.5° | 1222.6 | 1224.3 | 1226.0 | 1223.9 | 1221.7 | 1218.9 | 1216.1 | 1203.7 | 1191.2 | 1175.1 | 1159.0 |
| 10° | 1163.7 | 1167.6 | 1171.5 | 1179.8 | 1188.2 | 1197.7 | 1207.1 | 1205.4 | 1203.7 | 1199.0 | 1194.2 |
| 12.5° | 1034.5 | 1039.2 | 1043.9 | 1060.7 | 1077.4 | 1098.9 | 1120.4 | 1138.8 | 1157.3 | 1170.2 | 1183.1 |
| 15° | 859.7 | 872.8 | 885.9 | 901.1 | 916.4 | 948.0 | 979.5 | 1018.4 | 1057.2 | 1091.8 | 1126.4 |
| 17.5° | 708.1 | 713.1 | 718.0 | 734.3 | 750.6 | 790.4 | 830.1 | 875.0 | 919.8 | 977.2 | 1034.5 |
| 20° | 582.7 | 587.2 | 591.7 | 613.2 | 634.7 | 665.8 | 697.0 | 747.4 | 797.9 | 859.5 | 921.1 |
| 22.5° | 489.5 | 496.6 | 503.7 | 515.7 | 527.8 | 557.6 | 587.5 | 632.3 | 677.2 | 745.3 | 813.3 |
| 25° | 428.6 | 433.7 | 438.9 | 446.2 | 453.5 | 477.3 | 501.1 | 538.1 | 575.0 | 637.5 | 700.0 |
| 27.5° | 386.9 | 389.1 | 391.2 | 398.5 | 405.8 | 421.3 | 436.7 | 468.5 | 500.3 | 553.3 | 606.3 |
| 30° | 354.3 | 355.8 | 357.3 | 363.7 | 370.2 | 380.7 | 391.2 | 414.2 | 437.2 | 484.0 | 530.8 |
| 32.5° | 331.5 | 332.6 | 333.7 | 338.6 | 343.5 | 351.1 | 358.6 | 375.3 | 392.1 | 430.7 | 469.4 |
| 35° | 310.9 | 311.5 | 312.2 | 315.8 | 319.5 | 325.1 | 330.7 | 343.3 | 356.0 | 386.5 | 417.0 |
| 37.5° | 292.9 | 293.7 | 294.6 | 296.7 | 298.9 | 303.8 | 308.8 | 318.8 | 328.9 | 352.3 | 375.7 |
| 40° | 275.3 | 276.8 | 278.3 | 279.8 | 281.3 | 285.4 | 289.4 | 297.2 | 304.9 | 324.2 | 343.5 |
| 42.5° | 260.2 | 261.7 | 263.2 | 263.9 | 264.5 | 266.9 | 269.2 | 276.3 | 283.4 | 297.8 | 312.2 |
| 45° | 245.6 | 246.3 | 246.9 | 247.6 | 248.2 | 250.1 | 252.1 | 258.3 | 264.5 | 277.0 | 289.4 |
| 47.5° | 232.3 | 232.3 | 232.3 | 232.7 | 233.2 | 234.9 | 236.6 | 241.1 | 245.6 | 255.3 | 265.0 |
| 50° | 219.4 | 219.4 | 219.4 | 218.8 | 218.1 | 219.2 | 220.3 | 223.7 | 227.2 | 235.8 | 244.3 |
| 52.5° | 204.0 | 204.0 | 204.0 | 204.2 | 204.4 | 204.4 | 204.4 | 207.4 | 210.4 | 218.1 | 225.9 |
| 55° | 188.5 | 189.4 | 190.2 | 189.6 | 188.9 | 189.4 | 189.8 | 191.7 | 193.7 | 199.9 | 206.1 |
| 57.5° | 173.1 | 173.5 | 173.9 | 173.7 | 173.5 | 173.7 | 173.9 | 175.6 | 177.4 | 182.1 | 186.8 |
| 60° | 158.5 | 158.5 | 158.5 | 158.0 | 157.6 | 158.0 | 158.5 | 159.3 | 160.2 | 164.5 | 168.8 |
| 62.5° | 142.1 | 142.4 | 142.6 | 142.8 | 143.0 | 142.6 | 142.1 | 143.2 | 144.3 | 147.5 | 150.7 |
| 65° | 125.8 | 126.0 | 126.3 | 126.9 | 127.5 | 127.1 | 126.7 | 127.8 | 128.8 | 131.2 | 133.6 |
| 67.5° | 111.2 | 110.8 | 110.4 | 110.6 | 110.8 | 111.4 | 112.1 | 112.3 | 112.5 | 115.1 | 117.7 |
| 70° | 94.0 | 94.5 | 94.9 | 94.7 | 94.5 | 94.7 | 94.9 | 95.5 | 96.2 | 98.1 | 100.1 |
| 72.5° | 78.6 | 78.8 | 79.0 | 79.0 | 79.0 | 79.4 | 79.9 | 80.5 | 81.2 | 82.2 | 83.3 |
| 75° | 64.4 | 64.4 | 64.4 | 64.8 | 65.3 | 65.5 | 65.7 | 65.7 | 65.7 | 66.6 | 67.4 |
| 77.5° | 49.0 | 50.0 | 51.1 | 50.9 | 50.7 | 51.1 | 51.5 | 52.2 | 52.8 | 53.2 | 53.7 |
| 80° | 35.6 | 35.6 | 35.6 | 35.9 | 36.1 | 36.7 | 37.4 | 37.8 | 38.2 | 39.1 | 39.9 |
| 82.5° | 22.8 | 23.0 | 23.2 | 23.8 | 24.5 | 24.9 | 25.3 | 26.0 | 26.6 | 26.6 | 26.6 |
| 85° | 14.2 | 13.7 | 13.3 | 13.7 | 14.2 | 14.6 | 15.0 | 15.2 | 15.5 | 15.9 | 16.3 |
| 87.5° | 6.9 | 6.9 | 6.9 | 6.9 | 6.9 | 7.1 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 |
| 90° | 31.8 | 32.9 | 31.8 | 30.7 | 31.8 | 29.6 | 28.5 | 27.4 | 26.3 | 27.4 | 24.1 |
| 92.5° | 58.0 | 60.2 | 59.1 | 63.5 | 65.7 | 73.4 | 84.3 | 108.4 | 152.2 | 203.7 | 225.6 |
| 95° | 127.0 | 131.4 | 139.1 | 148.9 | 169.7 | 209.2 | 267.2 | 394.2 | 526.7 | 649.4 | 578.2 |
| 97.5° | 260.6 | 272.7 | 299.0 | 340.6 | 413.9 | 538.8 | 683.3 | 905.6 | 1032.7 | 998.7 | 745.8 |
| 100° | 686.6 | 685.5 | 728.2 | 808.2 | 918.8 | 1074.3 | 1202.4 | 1291.1 | 1252.8 | 1037.1 | 700.9 |
| 102.5° | 1087.4 | 1119.2 | 1153.1 | 1212.3 | 1292.2 | 1376.5 | 1437.9 | 1419.2 | 1263.7 | 965.9 | 635.2 |
| 105° | 1393.0 | 1398.4 | 1433.5 | 1475.1 | 1525.5 | 1553.9 | 1533.1 | 1423.6 | 1194.7 | 880.5 | 583.7 |
| 107.5° | 1592.3 | 1604.3 | 1618.5 | 1638.3 | 1644.8 | 1615.3 | 1529.8 | 1357.9 | 1096.2 | 804.9 | 546.5 |
| 110° | 1706.2 | 1708.3 | 1710.5 | 1701.8 | 1671.1 | 1594.5 | 1456.5 | 1255.0 | 1004.2 | 742.5 | 526.7 |



TEST NUMBER: P831344

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 112.5° | 1729.1 | 1728.1 | 1717.1 | 1685.3 | 1622.9 | 1518.9 | 1360.1 | 1153.1 | 924.3 | 700.9 | 515.8 |
| 115° | 1694.1 | 1688.6 | 1666.7 | 1618.5 | 1536.4 | 1417.0 | 1256.1 | 1065.5 | 862.9 | 673.5 | 514.7 |
| 117.5° | 1617.4 | 1609.8 | 1576.9 | 1523.3 | 1437.9 | 1314.1 | 1166.3 | 997.6 | 822.4 | 654.9 | 515.8 |
| 120° | 1516.7 | 1510.1 | 1483.8 | 1422.5 | 1336.0 | 1225.4 | 1094.0 | 946.2 | 791.8 | 642.8 | 520.2 |
| 122.5° | 1422.5 | 1413.8 | 1384.2 | 1330.5 | 1256.1 | 1155.3 | 1036.0 | 905.6 | 766.6 | 635.2 | 527.8 |
| 125° | 1336.0 | 1328.3 | 1301.0 | 1252.8 | 1182.7 | 1095.1 | 990.0 | 870.6 | 745.8 | 628.6 | 535.5 |
| 127.5° | 1261.5 | 1255.0 | 1229.8 | 1188.2 | 1124.7 | 1043.6 | 947.3 | 838.8 | 726.0 | 625.3 | 544.3 |
| 130° | 1200.2 | 1191.5 | 1168.5 | 1129.0 | 1071.0 | 996.5 | 907.8 | 809.3 | 710.7 | 622.0 | 553.0 |
| 132.5° | 1140.0 | 1134.5 | 1114.8 | 1075.4 | 1021.7 | 951.6 | 870.6 | 781.9 | 696.5 | 620.9 | 559.6 |
| 135° | 1083.0 | 1075.4 | 1055.7 | 1022.8 | 969.2 | 906.7 | 835.6 | 757.8 | 684.4 | 619.8 | 566.2 |
| 137.5° | 1022.8 | 1016.2 | 999.8 | 965.9 | 919.9 | 864.0 | 800.5 | 734.8 | 673.5 | 617.6 | 570.5 |
| 140° | 959.3 | 960.4 | 942.9 | 912.2 | 870.6 | 823.5 | 770.9 | 715.1 | 663.6 | 616.5 | 574.9 |
| 142.5° | 900.2 | 901.3 | 885.9 | 859.6 | 825.7 | 786.3 | 742.5 | 696.5 | 654.9 | 614.3 | 578.2 |
| 145° | 846.5 | 844.3 | 835.6 | 812.6 | 785.2 | 753.4 | 718.4 | 682.2 | 647.2 | 612.2 | 579.3 |
| 147.5° | 800.5 | 799.4 | 790.7 | 774.2 | 752.3 | 729.3 | 699.8 | 670.2 | 639.5 | 608.9 | 579.3 |
| 150° | 761.1 | 761.1 | 754.5 | 742.5 | 726.0 | 705.2 | 682.2 | 657.1 | 631.9 | 604.5 | 579.3 |
| 152.5° | 728.2 | 728.2 | 724.9 | 714.0 | 702.0 | 685.5 | 665.8 | 645.0 | 623.1 | 599.0 | 576.0 |
| 155° | 702.0 | 700.9 | 698.7 | 689.9 | 680.1 | 666.9 | 650.5 | 633.0 | 614.3 | 592.4 | 573.8 |
| 157.5° | 676.8 | 676.8 | 674.6 | 668.0 | 659.2 | 648.3 | 635.2 | 619.8 | 604.5 | 587.0 | 570.5 |
| 160° | 652.7 | 653.8 | 653.8 | 647.2 | 639.5 | 631.9 | 620.9 | 608.9 | 594.6 | 580.4 | 568.4 |
| 162.5° | 630.8 | 631.9 | 631.9 | 626.4 | 622.0 | 615.4 | 605.6 | 595.7 | 584.8 | 573.8 | 564.0 |
| 165° | 612.2 | 612.2 | 613.3 | 608.9 | 604.5 | 599.0 | 591.3 | 584.8 | 576.0 | 567.3 | 559.6 |
| 167.5° | 593.5 | 593.5 | 594.6 | 591.3 | 589.2 | 584.8 | 580.4 | 574.9 | 567.3 | 560.7 | 555.2 |
| 170° | 577.1 | 577.1 | 578.2 | 576.0 | 574.9 | 572.7 | 568.4 | 565.1 | 559.6 | 554.1 | 550.8 |
| 172.5° | 561.8 | 562.9 | 565.1 | 562.9 | 562.9 | 561.8 | 558.5 | 556.3 | 551.9 | 548.6 | 547.5 |
| 175° | 550.8 | 551.9 | 553.0 | 551.9 | 551.9 | 551.9 | 549.7 | 548.6 | 546.5 | 544.3 | 544.3 |
| 177.5° | 543.2 | 543.2 | 545.4 | 544.3 | 545.4 | 545.4 | 544.3 | 543.2 | 542.1 | 541.0 | 542.1 |
| 180° | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 |



TEST NUMBER: P831344

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 0° | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 |
| 2.5° | 989.8 | 987.2 | 977.8 | 968.4 | 957.6 | 946.9 | 938.9 | 931.0 | 919.2 | 907.4 | 897.7 |
| 5° | 1072.7 | 1060.7 | 1040.7 | 1020.7 | 993.7 | 966.6 | 948.4 | 930.1 | 905.7 | 881.2 | 861.6 |
| 7.5° | 1138.4 | 1117.8 | 1089.9 | 1062.0 | 1026.5 | 991.1 | 957.6 | 924.1 | 886.8 | 849.4 | 818.9 |
| 10° | 1180.3 | 1166.3 | 1134.1 | 1101.9 | 1054.5 | 1007.0 | 960.2 | 913.4 | 865.3 | 817.2 | 776.8 |
| 12.5° | 1184.4 | 1185.6 | 1156.0 | 1126.4 | 1072.7 | 1019.0 | 962.1 | 905.2 | 844.7 | 784.1 | 737.1 |
| 15° | 1148.5 | 1170.6 | 1154.3 | 1138.0 | 1083.9 | 1029.8 | 959.8 | 889.8 | 820.0 | 750.2 | 695.9 |
| 17.5° | 1081.9 | 1129.4 | 1131.8 | 1134.1 | 1080.0 | 1025.9 | 948.4 | 870.9 | 791.9 | 712.8 | 655.7 |
| 20° | 991.1 | 1061.1 | 1085.2 | 1109.2 | 1065.2 | 1021.2 | 937.9 | 854.6 | 766.1 | 677.6 | 617.7 |
| 22.5° | 898.4 | 983.4 | 1027.4 | 1071.4 | 1038.8 | 1006.1 | 917.5 | 828.8 | 735.4 | 642.0 | 581.2 |
| 25° | 792.7 | 885.5 | 953.1 | 1020.7 | 1000.8 | 980.8 | 893.4 | 806.0 | 706.6 | 607.2 | 545.2 |
| 27.5° | 700.6 | 794.9 | 876.5 | 958.0 | 953.8 | 949.5 | 862.7 | 776.0 | 674.2 | 572.4 | 512.5 |
| 30° | 618.6 | 706.4 | 797.7 | 888.9 | 899.4 | 910.0 | 826.2 | 742.5 | 640.5 | 538.5 | 480.7 |
| 32.5° | 546.0 | 622.7 | 720.6 | 818.5 | 839.1 | 859.7 | 784.1 | 708.6 | 607.6 | 506.7 | 451.1 |
| 35° | 486.5 | 556.1 | 654.0 | 751.9 | 777.7 | 803.5 | 737.8 | 672.1 | 573.7 | 475.4 | 422.3 |
| 37.5° | 433.9 | 492.1 | 587.7 | 683.2 | 714.8 | 746.3 | 687.5 | 628.7 | 536.6 | 444.5 | 395.7 |
| 40° | 390.3 | 437.2 | 525.0 | 612.8 | 649.3 | 685.8 | 637.3 | 588.7 | 501.4 | 414.0 | 369.1 |
| 42.5° | 353.8 | 395.5 | 475.2 | 554.8 | 589.8 | 624.8 | 583.8 | 542.8 | 465.1 | 387.3 | 346.3 |
| 45° | 322.7 | 356.0 | 428.4 | 500.7 | 534.0 | 567.3 | 532.1 | 496.8 | 428.4 | 359.9 | 321.6 |
| 47.5° | 293.5 | 322.1 | 383.9 | 445.7 | 475.4 | 505.0 | 477.5 | 450.0 | 392.1 | 334.1 | 299.5 |
| 50° | 267.3 | 290.3 | 344.4 | 398.5 | 424.3 | 450.0 | 425.8 | 401.5 | 353.8 | 306.2 | 276.1 |
| 52.5° | 244.6 | 263.2 | 308.5 | 353.8 | 376.0 | 398.1 | 377.3 | 356.4 | 318.6 | 280.8 | 254.6 |
| 55° | 222.0 | 237.9 | 277.2 | 316.5 | 331.5 | 346.5 | 330.4 | 314.3 | 283.9 | 253.4 | 231.2 |
| 57.5° | 201.0 | 215.1 | 247.3 | 279.6 | 291.2 | 302.7 | 288.1 | 273.5 | 250.6 | 227.6 | 209.1 |
| 60° | 180.4 | 192.0 | 218.8 | 245.6 | 252.7 | 259.8 | 248.0 | 236.2 | 220.1 | 204.0 | 187.4 |
| 62.5° | 161.2 | 171.8 | 191.7 | 211.7 | 216.4 | 221.2 | 212.1 | 203.1 | 190.9 | 178.6 | 165.8 |
| 65° | 141.5 | 149.4 | 165.8 | 182.1 | 185.1 | 188.1 | 180.1 | 172.2 | 163.0 | 153.7 | 144.3 |
| 67.5° | 123.2 | 128.8 | 142.1 | 155.5 | 155.7 | 155.9 | 149.4 | 143.0 | 137.8 | 132.7 | 125.2 |
| 70° | 105.4 | 110.8 | 119.6 | 128.4 | 128.6 | 128.8 | 123.7 | 118.5 | 114.7 | 110.8 | 105.2 |
| 72.5° | 87.2 | 91.0 | 97.7 | 104.4 | 103.9 | 103.5 | 100.3 | 97.1 | 94.0 | 91.0 | 87.0 |
| 75° | 70.6 | 73.9 | 78.4 | 82.9 | 81.6 | 80.3 | 78.6 | 76.9 | 74.3 | 71.7 | 69.1 |
| 77.5° | 55.6 | 57.5 | 60.1 | 62.7 | 61.8 | 61.0 | 59.5 | 58.0 | 56.0 | 54.1 | 53.0 |
| 80° | 40.8 | 41.7 | 43.4 | 45.1 | 44.7 | 44.2 | 42.5 | 40.8 | 40.4 | 39.9 | 38.4 |
| 82.5° | 27.7 | 28.8 | 29.2 | 29.6 | 29.4 | 29.2 | 27.9 | 26.6 | 26.2 | 25.8 | 25.6 |
| 85° | 16.5 | 16.7 | 17.0 | 17.2 | 16.5 | 15.9 | 15.5 | 15.0 | 15.0 | 15.0 | 14.8 |
| 87.5° | 7.5 | 7.7 | 7.7 | 7.7 | 7.5 | 7.3 | 6.9 | 6.4 | 6.7 | 6.9 | 6.9 |
| 90° | 20.8 | 17.5 | 14.2 | 12.0 | 9.9 | 6.6 | 4.4 | 2.2 | 4.4 | 6.6 | 9.9 |
| 92.5° | 168.6 | 110.6 | 75.6 | 55.8 | 44.9 | 35.0 | 24.1 | 16.4 | 24.1 | 35.0 | 44.9 |
| 95° | 398.6 | 235.4 | 142.4 | 99.7 | 71.2 | 52.6 | 40.5 | 37.2 | 40.5 | 52.6 | 71.2 |
| 97.5° | 443.5 | 254.1 | 162.1 | 115.0 | 86.5 | 70.1 | 60.2 | 59.1 | 60.2 | 70.1 | 86.5 |
| 100° | 412.8 | 250.8 | 174.1 | 131.4 | 105.1 | 89.8 | 82.1 | 81.0 | 82.1 | 89.8 | 105.1 |
| 102.5° | 386.6 | 255.2 | 188.4 | 150.0 | 127.0 | 112.8 | 106.2 | 104.0 | 106.2 | 112.8 | 127.0 |
| 105° | 376.7 | 263.9 | 204.8 | 170.8 | 150.0 | 136.9 | 130.3 | 127.0 | 130.3 | 136.9 | 150.0 |
| 107.5° | 374.5 | 278.2 | 225.6 | 193.8 | 174.1 | 161.0 | 154.4 | 151.1 | 154.4 | 161.0 | 174.1 |
| 110° | 380.0 | 296.8 | 247.5 | 216.8 | 198.2 | 186.2 | 180.7 | 177.4 | 180.7 | 186.2 | 198.2 |



TEST NUMBER: P831344

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 390.9 | 315.4 | 270.5 | 240.9 | 222.3 | 210.3 | 204.8 | 201.5 | 204.8 | 210.3 | 222.3 |
| 115° | 403.0 | 336.2 | 294.6 | 265.0 | 246.4 | 235.4 | 228.9 | 224.5 | 228.9 | 235.4 | 246.4 |
| 117.5° | 418.3 | 358.1 | 316.5 | 289.1 | 268.3 | 258.4 | 253.0 | 247.5 | 253.0 | 258.4 | 268.3 |
| 120° | 435.8 | 378.9 | 339.5 | 312.1 | 291.3 | 280.3 | 274.9 | 271.6 | 274.9 | 280.3 | 291.3 |
| 122.5° | 452.3 | 400.8 | 362.5 | 332.9 | 313.2 | 301.1 | 295.7 | 292.4 | 295.7 | 301.1 | 313.2 |
| 125° | 469.8 | 421.6 | 383.3 | 353.7 | 332.9 | 320.9 | 314.3 | 312.1 | 314.3 | 320.9 | 332.9 |
| 127.5° | 484.0 | 440.2 | 403.0 | 373.4 | 350.4 | 338.4 | 330.7 | 327.4 | 330.7 | 338.4 | 350.4 |
| 130° | 498.3 | 456.7 | 420.5 | 390.9 | 368.0 | 354.8 | 345.0 | 341.7 | 345.0 | 354.8 | 368.0 |
| 132.5° | 511.4 | 470.9 | 435.8 | 407.4 | 384.4 | 368.0 | 357.0 | 352.6 | 357.0 | 368.0 | 384.4 |
| 135° | 522.4 | 485.1 | 451.2 | 421.6 | 398.6 | 382.2 | 370.1 | 365.8 | 370.1 | 382.2 | 398.6 |
| 137.5° | 531.1 | 495.0 | 462.1 | 434.8 | 411.8 | 394.2 | 382.2 | 377.8 | 382.2 | 394.2 | 411.8 |
| 140° | 537.7 | 504.8 | 473.1 | 445.7 | 423.8 | 406.3 | 395.3 | 389.9 | 395.3 | 406.3 | 423.8 |
| 142.5° | 544.3 | 512.5 | 481.8 | 456.7 | 434.8 | 419.4 | 407.4 | 403.0 | 407.4 | 419.4 | 434.8 |
| 145° | 548.6 | 519.1 | 490.6 | 465.4 | 446.8 | 430.4 | 420.5 | 417.2 | 420.5 | 430.4 | 446.8 |
| 147.5° | 551.9 | 524.5 | 498.3 | 476.4 | 457.7 | 443.5 | 433.7 | 431.5 | 433.7 | 443.5 | 457.7 |
| 150° | 553.0 | 530.0 | 504.8 | 485.1 | 469.8 | 455.6 | 446.8 | 445.7 | 446.8 | 455.6 | 469.8 |
| 152.5° | 555.2 | 533.3 | 512.5 | 493.9 | 480.7 | 468.7 | 459.9 | 459.9 | 459.9 | 468.7 | 480.7 |
| 155° | 555.2 | 537.7 | 519.1 | 503.7 | 491.7 | 480.7 | 474.2 | 474.2 | 474.2 | 480.7 | 491.7 |
| 157.5° | 556.3 | 539.9 | 524.5 | 512.5 | 501.6 | 491.7 | 486.2 | 485.1 | 486.2 | 491.7 | 501.6 |
| 160° | 556.3 | 543.2 | 530.0 | 519.1 | 511.4 | 502.6 | 498.3 | 498.3 | 498.3 | 502.6 | 511.4 |
| 162.5° | 555.2 | 544.3 | 533.3 | 524.5 | 518.0 | 511.4 | 508.1 | 508.1 | 508.1 | 511.4 | 518.0 |
| 165° | 553.0 | 545.4 | 536.6 | 528.9 | 524.5 | 519.1 | 516.9 | 518.0 | 516.9 | 519.1 | 524.5 |
| 167.5° | 551.9 | 545.4 | 538.8 | 533.3 | 530.0 | 525.6 | 524.5 | 525.6 | 524.5 | 525.6 | 530.0 |
| 170° | 548.6 | 544.3 | 538.8 | 536.6 | 534.4 | 531.1 | 530.0 | 532.2 | 530.0 | 531.1 | 534.4 |
| 172.5° | 547.5 | 544.3 | 539.9 | 538.8 | 537.7 | 535.5 | 535.5 | 536.6 | 535.5 | 535.5 | 537.7 |
| 175° | 545.4 | 543.2 | 541.0 | 539.9 | 539.9 | 537.7 | 538.8 | 539.9 | 538.8 | 537.7 | 539.9 |
| 177.5° | 544.3 | 542.1 | 541.0 | 541.0 | 541.0 | 539.9 | 541.0 | 542.1 | 541.0 | 539.9 | 541.0 |
| 180° | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 |



TEST NUMBER: P831344

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|--------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| 0° | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 | 925.4 |
| 2.5° | 888.1 | 879.7 | 871.3 | 864.9 | 858.4 | 847.5 | 836.5 | 833.9 | 831.4 | 827.7 | 824.1 |
| 5° | 842.1 | 821.5 | 800.9 | 782.4 | 763.9 | 749.6 | 735.2 | 725.7 | 716.3 | 709.4 | 702.5 |
| 7.5° | 788.4 | 757.5 | 726.6 | 704.7 | 682.8 | 662.0 | 641.1 | 634.5 | 627.8 | 618.8 | 609.8 |
| 10° | 736.5 | 702.3 | 668.2 | 639.6 | 611.1 | 590.7 | 570.3 | 562.1 | 554.0 | 542.6 | 531.2 |
| 12.5° | 690.1 | 652.7 | 615.4 | 586.6 | 557.8 | 538.1 | 518.3 | 506.5 | 494.7 | 488.3 | 481.8 |
| 15° | 641.6 | 601.6 | 561.7 | 535.1 | 508.4 | 490.6 | 472.8 | 462.5 | 452.2 | 446.0 | 439.7 |
| 17.5° | 598.6 | 559.1 | 519.6 | 494.1 | 468.5 | 452.2 | 435.9 | 426.8 | 417.8 | 413.1 | 408.4 |
| 20° | 557.8 | 519.2 | 480.5 | 455.6 | 430.7 | 417.4 | 404.1 | 398.3 | 392.5 | 388.6 | 384.8 |
| 22.5° | 520.5 | 482.5 | 444.5 | 423.2 | 401.9 | 391.2 | 380.5 | 376.4 | 372.3 | 369.1 | 365.9 |
| 25° | 483.1 | 449.2 | 415.3 | 397.2 | 379.2 | 370.4 | 361.6 | 357.5 | 353.4 | 350.2 | 347.0 |
| 27.5° | 452.6 | 420.2 | 387.8 | 372.3 | 356.9 | 350.0 | 343.1 | 339.9 | 336.7 | 333.7 | 330.7 |
| 30° | 423.0 | 394.0 | 365.0 | 351.7 | 338.4 | 332.2 | 325.9 | 322.7 | 319.5 | 316.7 | 313.9 |
| 32.5° | 395.5 | 370.6 | 345.7 | 333.4 | 321.2 | 316.1 | 310.9 | 307.0 | 303.2 | 301.0 | 298.9 |
| 35° | 369.3 | 347.0 | 324.6 | 314.6 | 304.5 | 299.3 | 294.2 | 290.9 | 287.7 | 286.0 | 284.3 |
| 37.5° | 347.0 | 327.0 | 307.0 | 297.4 | 287.7 | 282.8 | 277.8 | 275.0 | 272.3 | 271.6 | 271.0 |
| 40° | 324.2 | 307.0 | 289.9 | 280.4 | 271.0 | 266.7 | 262.4 | 260.7 | 258.9 | 258.5 | 258.1 |
| 42.5° | 305.3 | 288.6 | 271.8 | 263.2 | 254.6 | 251.0 | 247.3 | 246.5 | 245.6 | 246.3 | 246.9 |
| 45° | 283.4 | 269.5 | 255.5 | 247.6 | 239.6 | 236.6 | 233.6 | 233.0 | 232.3 | 233.6 | 234.9 |
| 47.5° | 265.0 | 252.1 | 239.2 | 231.7 | 224.2 | 222.0 | 219.9 | 219.7 | 219.4 | 221.2 | 222.9 |
| 50° | 246.1 | 233.6 | 221.2 | 215.1 | 209.1 | 207.2 | 205.3 | 205.9 | 206.6 | 209.3 | 212.1 |
| 52.5° | 228.5 | 216.9 | 205.3 | 199.7 | 194.1 | 192.8 | 191.5 | 193.0 | 194.5 | 197.5 | 200.5 |
| 55° | 209.1 | 198.6 | 188.1 | 183.8 | 179.5 | 178.2 | 176.9 | 179.9 | 182.9 | 185.7 | 188.5 |
| 57.5° | 190.7 | 181.4 | 172.2 | 168.3 | 164.5 | 164.3 | 164.0 | 166.8 | 169.6 | 172.6 | 175.6 |
| 60° | 170.9 | 163.2 | 155.5 | 152.4 | 149.4 | 149.9 | 150.3 | 153.5 | 156.7 | 159.1 | 161.5 |
| 62.5° | 152.9 | 146.4 | 140.0 | 137.2 | 134.4 | 135.5 | 136.6 | 139.8 | 143.0 | 145.8 | 148.6 |
| 65° | 134.8 | 129.5 | 124.1 | 122.2 | 120.2 | 121.7 | 123.2 | 126.0 | 128.8 | 130.8 | 132.7 |
| 67.5° | 117.7 | 113.2 | 108.6 | 107.1 | 105.6 | 107.1 | 108.6 | 111.4 | 114.2 | 116.2 | 118.1 |
| 70° | 99.6 | 96.0 | 92.3 | 91.3 | 90.2 | 91.9 | 93.6 | 96.0 | 98.3 | 100.3 | 102.2 |
| 72.5° | 82.9 | 80.1 | 77.3 | 77.1 | 76.9 | 78.4 | 79.9 | 82.2 | 84.6 | 85.9 | 87.2 |
| 75° | 66.6 | 65.1 | 63.6 | 63.3 | 63.1 | 64.6 | 66.1 | 67.4 | 68.7 | 69.8 | 70.9 |
| 77.5° | 52.0 | 50.7 | 49.4 | 49.6 | 49.8 | 50.9 | 52.0 | 53.2 | 54.5 | 55.2 | 55.8 |
| 80° | 36.9 | 36.5 | 36.1 | 36.5 | 36.9 | 37.8 | 38.6 | 39.5 | 40.4 | 40.8 | 41.2 |
| 82.5° | 25.3 | 24.9 | 24.5 | 25.1 | 25.8 | 26.4 | 27.1 | 27.7 | 28.3 | 28.6 | 28.8 |
| 85° | 14.6 | 15.2 | 15.9 | 15.9 | 15.9 | 16.1 | 16.3 | 16.5 | 16.7 | 16.5 | 16.3 |
| 87.5° | 6.9 | 7.1 | 7.3 | 7.3 | 7.3 | 7.5 | 7.7 | 7.7 | 7.7 | 7.5 | 7.3 |
| 90° | 12.0 | 14.2 | 17.5 | 20.8 | 24.1 | 27.4 | 26.3 | 27.4 | 28.5 | 29.6 | 31.8 |
| 92.5° | 55.8 | 75.6 | 110.6 | 168.6 | 225.6 | 203.7 | 152.2 | 108.4 | 84.3 | 73.4 | 65.7 |
| 95° | 99.7 | 142.4 | 235.4 | 398.6 | 578.2 | 649.4 | 526.7 | 394.2 | 267.2 | 209.2 | 169.7 |
| 97.5° | 115.0 | 162.1 | 254.1 | 443.5 | 745.8 | 998.7 | 1032.7 | 905.6 | 683.3 | 538.8 | 413.9 |
| 100° | 131.4 | 174.1 | 250.8 | 412.8 | 700.9 | 1037.1 | 1252.8 | 1291.1 | 1202.4 | 1074.3 | 918.8 |
| 102.5° | 150.0 | 188.4 | 255.2 | 386.6 | 635.2 | 965.9 | 1263.7 | 1419.2 | 1437.9 | 1376.5 | 1292.2 |
| 105° | 170.8 | 204.8 | 263.9 | 376.7 | 583.7 | 880.5 | 1194.7 | 1423.6 | 1533.1 | 1553.9 | 1525.5 |
| 107.5° | 193.8 | 225.6 | 278.2 | 374.5 | 546.5 | 804.9 | 1096.2 | 1357.9 | 1529.8 | 1615.3 | 1644.8 |
| 110° | 216.8 | 247.5 | 296.8 | 380.0 | 526.7 | 742.5 | 1004.2 | 1255.0 | 1456.5 | 1594.5 | 1671.1 |



TEST NUMBER: P831344

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|--------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| 112.5° | 240.9 | 270.5 | 315.4 | 390.9 | 515.8 | 700.9 | 924.3 | 1153.1 | 1360.1 | 1518.9 | 1622.9 |
| 115° | 265.0 | 294.6 | 336.2 | 403.0 | 514.7 | 673.5 | 862.9 | 1065.5 | 1256.1 | 1417.0 | 1536.4 |
| 117.5° | 289.1 | 316.5 | 358.1 | 418.3 | 515.8 | 654.9 | 822.4 | 997.6 | 1166.3 | 1314.1 | 1437.9 |
| 120° | 312.1 | 339.5 | 378.9 | 435.8 | 520.2 | 642.8 | 791.8 | 946.2 | 1094.0 | 1225.4 | 1336.0 |
| 122.5° | 332.9 | 362.5 | 400.8 | 452.3 | 527.8 | 635.2 | 766.6 | 905.6 | 1036.0 | 1155.3 | 1256.1 |
| 125° | 353.7 | 383.3 | 421.6 | 469.8 | 535.5 | 628.6 | 745.8 | 870.6 | 990.0 | 1095.1 | 1182.7 |
| 127.5° | 373.4 | 403.0 | 440.2 | 484.0 | 544.3 | 625.3 | 726.0 | 838.8 | 947.3 | 1043.6 | 1124.7 |
| 130° | 390.9 | 420.5 | 456.7 | 498.3 | 553.0 | 622.0 | 710.7 | 809.3 | 907.8 | 996.5 | 1071.0 |
| 132.5° | 407.4 | 435.8 | 470.9 | 511.4 | 559.6 | 620.9 | 696.5 | 781.9 | 870.6 | 951.6 | 1021.7 |
| 135° | 421.6 | 451.2 | 485.1 | 522.4 | 566.2 | 619.8 | 684.4 | 757.8 | 835.6 | 906.7 | 969.2 |
| 137.5° | 434.8 | 462.1 | 495.0 | 531.1 | 570.5 | 617.6 | 673.5 | 734.8 | 800.5 | 864.0 | 919.9 |
| 140° | 445.7 | 473.1 | 504.8 | 537.7 | 574.9 | 616.5 | 663.6 | 715.1 | 770.9 | 823.5 | 870.6 |
| 142.5° | 456.7 | 481.8 | 512.5 | 544.3 | 578.2 | 614.3 | 654.9 | 696.5 | 742.5 | 786.3 | 825.7 |
| 145° | 465.4 | 490.6 | 519.1 | 548.6 | 579.3 | 612.2 | 647.2 | 682.2 | 718.4 | 753.4 | 785.2 |
| 147.5° | 476.4 | 498.3 | 524.5 | 551.9 | 579.3 | 608.9 | 639.5 | 670.2 | 699.8 | 729.3 | 752.3 |
| 150° | 485.1 | 504.8 | 530.0 | 553.0 | 579.3 | 604.5 | 631.9 | 657.1 | 682.2 | 705.2 | 726.0 |
| 152.5° | 493.9 | 512.5 | 533.3 | 555.2 | 576.0 | 599.0 | 623.1 | 645.0 | 665.8 | 685.5 | 702.0 |
| 155° | 503.7 | 519.1 | 537.7 | 555.2 | 573.8 | 592.4 | 614.3 | 633.0 | 650.5 | 666.9 | 680.1 |
| 157.5° | 512.5 | 524.5 | 539.9 | 556.3 | 570.5 | 587.0 | 604.5 | 619.8 | 635.2 | 648.3 | 659.2 |
| 160° | 519.1 | 530.0 | 543.2 | 556.3 | 568.4 | 580.4 | 594.6 | 608.9 | 620.9 | 631.9 | 639.5 |
| 162.5° | 524.5 | 533.3 | 544.3 | 555.2 | 564.0 | 573.8 | 584.8 | 595.7 | 605.6 | 615.4 | 622.0 |
| 165° | 528.9 | 536.6 | 545.4 | 553.0 | 559.6 | 567.3 | 576.0 | 584.8 | 591.3 | 599.0 | 604.5 |
| 167.5° | 533.3 | 538.8 | 545.4 | 551.9 | 555.2 | 560.7 | 567.3 | 574.9 | 580.4 | 584.8 | 589.2 |
| 170° | 536.6 | 538.8 | 544.3 | 548.6 | 550.8 | 554.1 | 559.6 | 565.1 | 568.4 | 572.7 | 574.9 |
| 172.5° | 538.8 | 539.9 | 544.3 | 547.5 | 547.5 | 548.6 | 551.9 | 556.3 | 558.5 | 561.8 | 562.9 |
| 175° | 539.9 | 541.0 | 543.2 | 545.4 | 544.3 | 544.3 | 546.5 | 548.6 | 549.7 | 551.9 | 551.9 |
| 177.5° | 541.0 | 541.0 | 542.1 | 544.3 | 542.1 | 541.0 | 542.1 | 543.2 | 544.3 | 545.4 | 545.4 |
| 180° | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 | 541.0 |



TEST NUMBER: P831344

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|--------|--------|--------|--------|--------|
| 0° | 925.4 | 925.4 | 925.4 | 925.4 |
| 2.5° | 822.6 | 821.1 | 815.0 | 809.0 |
| 5° | 697.4 | 692.2 | 690.5 | 688.8 |
| 7.5° | 609.4 | 608.9 | 599.9 | 590.9 |
| 10° | 531.8 | 532.5 | 524.3 | 516.2 |
| 12.5° | 476.4 | 471.1 | 470.4 | 469.8 |
| 15° | 434.8 | 429.9 | 429.0 | 428.1 |
| 17.5° | 405.4 | 402.4 | 401.5 | 400.7 |
| 20° | 383.0 | 381.3 | 379.8 | 378.3 |
| 22.5° | 363.7 | 361.6 | 360.3 | 359.0 |
| 25° | 345.0 | 343.1 | 342.7 | 342.3 |
| 27.5° | 328.3 | 325.9 | 325.9 | 325.9 |
| 30° | 312.4 | 310.9 | 310.3 | 309.6 |
| 32.5° | 297.6 | 296.3 | 296.3 | 296.3 |
| 35° | 283.6 | 283.0 | 282.1 | 281.3 |
| 37.5° | 271.0 | 271.0 | 270.5 | 270.1 |
| 40° | 258.7 | 259.4 | 259.4 | 259.4 |
| 42.5° | 247.6 | 248.2 | 248.2 | 248.2 |
| 45° | 236.0 | 237.0 | 237.5 | 237.9 |
| 47.5° | 224.6 | 226.3 | 226.7 | 227.2 |
| 50° | 213.4 | 214.7 | 214.9 | 215.1 |
| 52.5° | 202.0 | 203.5 | 204.6 | 205.7 |
| 55° | 190.0 | 191.5 | 192.2 | 192.8 |
| 57.5° | 177.1 | 178.6 | 178.9 | 179.1 |
| 60° | 163.0 | 164.5 | 164.9 | 165.3 |
| 62.5° | 149.4 | 150.3 | 150.7 | 151.2 |
| 65° | 134.0 | 135.3 | 136.1 | 137.0 |
| 67.5° | 119.2 | 120.2 | 120.2 | 120.2 |
| 70° | 102.6 | 103.1 | 103.7 | 104.4 |
| 72.5° | 87.4 | 87.6 | 87.6 | 87.6 |
| 75° | 71.3 | 71.7 | 71.9 | 72.1 |
| 77.5° | 56.0 | 56.3 | 56.3 | 56.3 |
| 80° | 41.0 | 40.8 | 40.8 | 40.8 |
| 82.5° | 28.1 | 27.5 | 27.5 | 27.5 |
| 85° | 16.1 | 15.9 | 16.1 | 16.3 |
| 87.5° | 7.3 | 7.3 | 7.3 | 7.3 |
| 90° | 30.7 | 31.8 | 32.9 | 31.8 |
| 92.5° | 63.5 | 59.1 | 60.2 | 58.0 |
| 95° | 148.9 | 139.1 | 131.4 | 127.0 |
| 97.5° | 340.6 | 299.0 | 272.7 | 260.6 |
| 100° | 808.2 | 728.2 | 685.5 | 686.6 |
| 102.5° | 1212.3 | 1153.1 | 1119.2 | 1087.4 |
| 105° | 1475.1 | 1433.5 | 1398.4 | 1393.0 |
| 107.5° | 1638.3 | 1618.5 | 1604.3 | 1592.3 |
| 110° | 1701.8 | 1710.5 | 1708.3 | 1706.2 |



TEST NUMBER: P831344

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|--------|--------|--------|--------|--------|
| 112.5° | 1685.3 | 1717.1 | 1728.1 | 1729.1 |
| 115° | 1618.5 | 1666.7 | 1688.6 | 1694.1 |
| 117.5° | 1523.3 | 1576.9 | 1609.8 | 1617.4 |
| 120° | 1422.5 | 1483.8 | 1510.1 | 1516.7 |
| 122.5° | 1330.5 | 1384.2 | 1413.8 | 1422.5 |
| 125° | 1252.8 | 1301.0 | 1328.3 | 1336.0 |
| 127.5° | 1188.2 | 1229.8 | 1255.0 | 1261.5 |
| 130° | 1129.0 | 1168.5 | 1191.5 | 1200.2 |
| 132.5° | 1075.4 | 1114.8 | 1134.5 | 1140.0 |
| 135° | 1022.8 | 1055.7 | 1075.4 | 1083.0 |
| 137.5° | 965.9 | 999.8 | 1016.2 | 1022.8 |
| 140° | 912.2 | 942.9 | 960.4 | 959.3 |
| 142.5° | 859.6 | 885.9 | 901.3 | 900.2 |
| 145° | 812.6 | 835.6 | 844.3 | 846.5 |
| 147.5° | 774.2 | 790.7 | 799.4 | 800.5 |
| 150° | 742.5 | 754.5 | 761.1 | 761.1 |
| 152.5° | 714.0 | 724.9 | 728.2 | 728.2 |
| 155° | 689.9 | 698.7 | 700.9 | 702.0 |
| 157.5° | 668.0 | 674.6 | 676.8 | 676.8 |
| 160° | 647.2 | 653.8 | 653.8 | 652.7 |
| 162.5° | 626.4 | 631.9 | 631.9 | 630.8 |
| 165° | 608.9 | 613.3 | 612.2 | 612.2 |
| 167.5° | 591.3 | 594.6 | 593.5 | 593.5 |
| 170° | 576.0 | 578.2 | 577.1 | 577.1 |
| 172.5° | 562.9 | 565.1 | 562.9 | 561.8 |
| 175° | 551.9 | 553.0 | 551.9 | 550.8 |
| 177.5° | 544.3 | 545.4 | 543.2 | 543.2 |
| 180° | 541.0 | 541.0 | 541.0 | 541.0 |



TEST NUMBER: P831344

CATALOG NUMBER: S123DIP-S340D1195U830-4F0-1E-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 | 8.86 | 9.53 | 10.00 | 10.65 | 12.22 | 11.10 | 11.76 | 12.23 | 12.89 | 14.46 |
| | 3H | 10.49 | 11.09 | 11.64 | 12.22 | 13.81 | 12.51 | 13.10 | 13.65 | 14.24 | 15.82 |
| | 4H | 11.06 | 11.63 | 12.22 | 12.76 | 14.35 | 12.95 | 13.52 | 14.10 | 14.65 | 16.24 |
| | 6H | 11.42 | 11.94 | 12.58 | 13.08 | 14.68 | 13.21 | 13.74 | 14.38 | 14.87 | 16.47 |
| | 8H | 11.51 | 12.01 | 12.68 | 13.16 | 14.75 | 13.27 | 13.77 | 14.44 | 14.92 | 16.51 |
| | 12H | 11.55 | 12.02 | 12.72 | 13.17 | 14.78 | 13.28 | 13.76 | 14.45 | 14.90 | 16.52 |
| 4H | 2H | 9.41 | 9.98 | 10.57 | 11.11 | 12.70 | 11.24 | 11.80 | 12.40 | 12.94 | 14.53 |
| | 3H | 11.22 | 11.70 | 12.39 | 12.86 | 14.46 | 12.84 | 13.31 | 14.01 | 14.47 | 16.07 |
| | 4H | 11.91 | 12.35 | 13.08 | 13.50 | 15.12 | 13.41 | 13.85 | 14.58 | 15.00 | 16.62 |
| | 6H | 12.38 | 12.75 | 13.55 | 13.92 | 15.53 | 13.81 | 14.18 | 14.98 | 15.35 | 16.96 |
| | 8H | 12.51 | 12.86 | 13.68 | 14.02 | 15.65 | 13.92 | 14.26 | 15.09 | 15.43 | 17.06 |
| | 12H | 12.57 | 12.89 | 13.76 | 14.06 | 15.69 | 13.95 | 14.27 | 15.14 | 15.44 | 17.07 |
| 8H | 4H | 12.17 | 12.51 | 13.34 | 13.68 | 15.30 | 13.51 | 13.85 | 14.68 | 15.02 | 16.64 |
| | 6H | 12.75 | 13.03 | 13.94 | 14.24 | 15.86 | 14.00 | 14.29 | 15.20 | 15.49 | 17.12 |
| | 8H | 12.95 | 13.20 | 14.15 | 14.39 | 16.03 | 14.18 | 14.43 | 15.38 | 15.61 | 17.26 |
| | 12H | 13.07 | 13.29 | 14.27 | 14.47 | 16.15 | 14.27 | 14.49 | 15.48 | 15.67 | 17.35 |
| 12H | 4H | 12.16 | 12.47 | 13.35 | 13.65 | 15.28 | 13.47 | 13.79 | 14.66 | 14.96 | 16.59 |
| | 6H | 12.80 | 13.05 | 14.00 | 14.23 | 15.88 | 14.02 | 14.26 | 15.21 | 15.45 | 17.09 |
| | 8H | 13.02 | 13.24 | 14.22 | 14.42 | 16.10 | 14.21 | 14.43 | 15.41 | 15.61 | 17.28 |