

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: P831498

Luminaire Tested: S123DIP-S560D1195U940-4F0-1E-UDD-G

Issue Date: 05/03/2024

Test Information

Test Method: LM-79-2019
Report Number: P831498
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-905-1, G3-1807-864-5)
Test Lab: INNOVATION CENTER
Issue Date: 05/03/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-S560D1195U940-4F0-1E-UDD-G
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 560 LUMENS PER FOOT, GRAZE OPTIC
UPLIGHT 1195 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: -

Summary

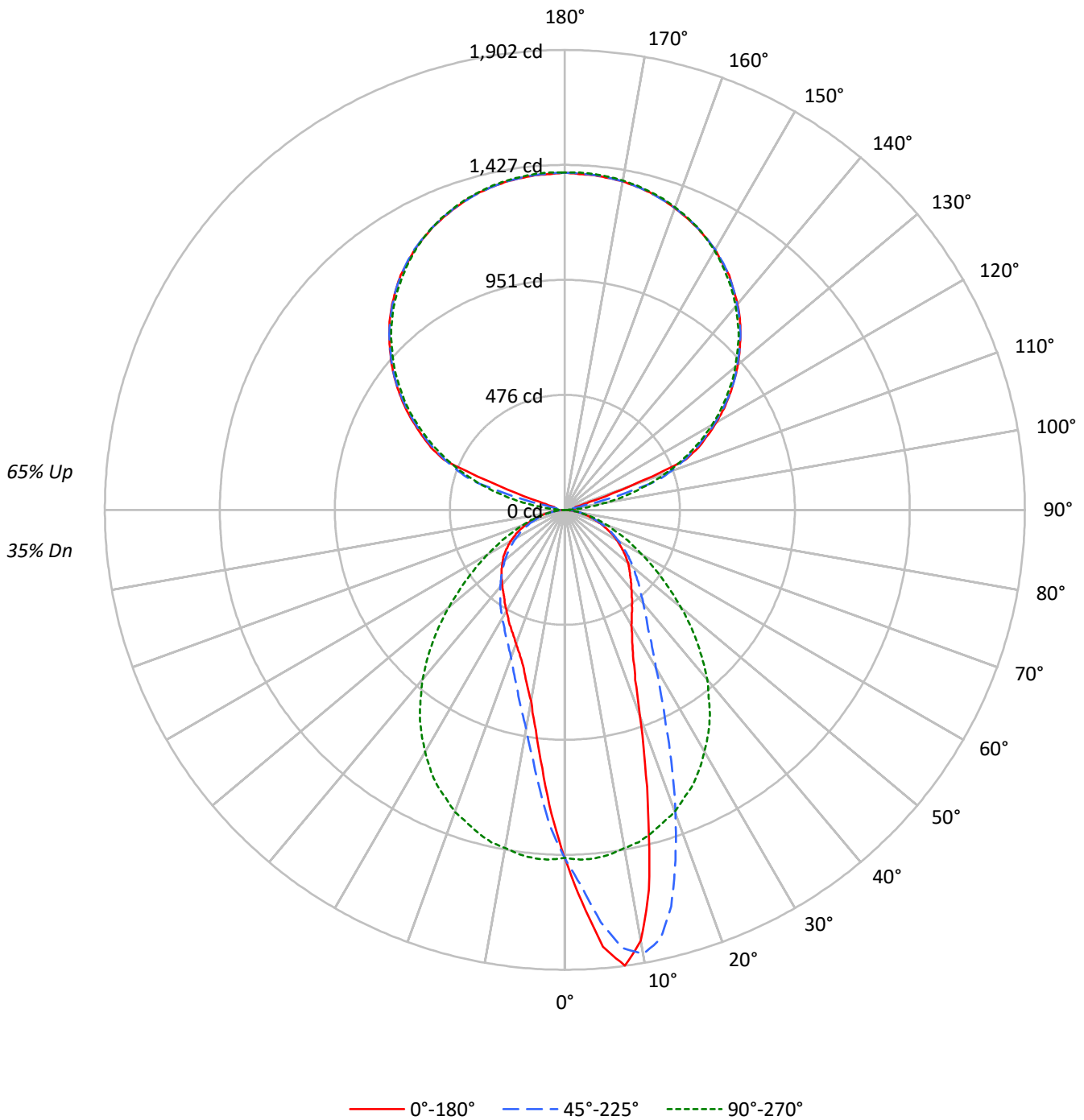
Lumens per Lamp: N/A
Luminaire Lumens: 6567.5 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 0.65 / 1.19 / 0.89
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 50.6
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: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

Luminous Intensity Polar Plot





TEST NUMBER: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

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 | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 75 | 75 | 75 | 58 | 58 | 58 | 43 | 43 | 43 | 35 | | | | |
| 1 | 95 | 91 | 87 | 84 | 86 | 82 | 79 | 76 | 66 | 64 | 62 | 52 | 50 | 49 | 38 | 37 | 37 | 30 | | | | |
| 2 | 87 | 80 | 74 | 69 | 78 | 72 | 67 | 63 | 59 | 55 | 52 | 46 | 44 | 42 | 34 | 33 | 31 | 26 | | | | |
| 3 | 79 | 70 | 63 | 58 | 72 | 64 | 58 | 53 | 52 | 48 | 44 | 41 | 38 | 36 | 31 | 29 | 27 | 23 | | | | |
| 4 | 73 | 63 | 55 | 49 | 66 | 57 | 51 | 46 | 46 | 42 | 38 | 37 | 33 | 31 | 28 | 26 | 24 | 20 | | | | |
| 5 | 67 | 56 | 48 | 43 | 60 | 51 | 44 | 39 | 42 | 37 | 33 | 33 | 30 | 27 | 25 | 23 | 21 | 18 | | | | |
| 6 | 62 | 50 | 43 | 37 | 56 | 46 | 39 | 34 | 38 | 33 | 29 | 30 | 27 | 24 | 23 | 21 | 19 | 16 | | | | |
| 7 | 57 | 45 | 38 | 33 | 52 | 42 | 35 | 30 | 34 | 29 | 26 | 28 | 24 | 21 | 21 | 19 | 17 | 14 | | | | |
| 8 | 53 | 41 | 34 | 29 | 48 | 38 | 31 | 27 | 31 | 27 | 23 | 25 | 22 | 19 | 20 | 17 | 15 | 13 | | | | |
| 9 | 49 | 38 | 31 | 26 | 45 | 35 | 28 | 24 | 29 | 24 | 21 | 23 | 20 | 17 | 18 | 16 | 14 | 12 | | | | |
| 10 | 46 | 35 | 28 | 23 | 42 | 32 | 26 | 22 | 27 | 22 | 19 | 22 | 18 | 16 | 17 | 15 | 13 | 11 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|-------|-------|-------|-------|-------|
| 0° | 15493 | 15493 | 15493 | 15493 | 15493 |
| 5° | 19594 | 18493 | 15632 | 12597 | 11575 |
| 10° | 19783 | 20382 | 15527 | 10041 | 8775 |
| 15° | 14900 | 18923 | 15422 | 8504 | 7421 |
| 20° | 10381 | 15313 | 15224 | 7436 | 6740 |
| 25° | 7917 | 11776 | 14890 | 6842 | 6322 |
| 30° | 6848 | 9355 | 14353 | 6421 | 5986 |
| 35° | 6355 | 7899 | 13736 | 6117 | 5749 |
| 40° | 6015 | 7086 | 12867 | 5828 | 5668 |
| 45° | 5815 | 6558 | 11764 | 5602 | 5632 |
| 50° | 5715 | 6141 | 10458 | 5397 | 5603 |
| 55° | 5502 | 5834 | 9175 | 5202 | 5628 |
| 60° | 5307 | 5507 | 7907 | 5018 | 5535 |
| 65° | 4984 | 5196 | 6821 | 4824 | 5428 |
| 70° | 4604 | 4803 | 5800 | 4497 | 5108 |
| 75° | 4167 | 4304 | 4974 | 4180 | 4666 |
| 80° | 3434 | 3769 | 3936 | 3645 | 3936 |
| 85° | 2717 | 3051 | 2890 | 3088 | 3137 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 80°
 Vertical Angle: 45°
 Luminance: 13431 cd/sqm



TEST NUMBER: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 136.1 | 2.1 |
| 10°-20° | 338.5 | 5.2 |
| 20°-30° | 400.8 | 6.1 |
| 30°-40° | 403.0 | 6.1 |
| 40°-50° | 369.8 | 5.6 |
| 50°-60° | 305.2 | 4.6 |
| 60°-70° | 215.9 | 3.3 |
| 70°-80° | 115.2 | 1.8 |
| 80°-90° | 32.0 | 0.5 |
| 90°-100° | 49.2 | 0.7 |
| 100°-110° | 237.7 | 3.6 |
| 110°-120° | 582.6 | 8.9 |
| 120°-130° | 739.6 | 11.3 |
| 130°-140° | 790.1 | 12.0 |
| 140°-150° | 738.8 | 11.2 |
| 150°-160° | 595.9 | 9.1 |
| 160°-170° | 384.6 | 5.9 |
| 170°-180° | 132.5 | 2.0 |
| 0°-30° | 875.4 | 13.3 |
| 0°-40° | 1278.4 | 19.5 |
| 0°-60° | 1953.4 | 29.7 |
| 0°-90° | 2316.5 | 35.3 |
| 90°-120° | 869.4 | 13.2 |
| 90°-150° | 3137.9 | 47.8 |
| 90°-180° | 4251.0 | 64.7 |
| 0°-180° | 6567.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1439 | 1439 | 1439 | 1439 | 1439 | |
| 5° | 1813 | 1712 | 1447 | 1166 | 1071 | 173 |
| 15° | 1337 | 1698 | 1384 | 763 | 666 | 369 |
| 25° | 667 | 992 | 1254 | 576 | 532 | 315 |
| 35° | 484 | 601 | 1045 | 466 | 438 | 304 |
| 45° | 382 | 431 | 773 | 368 | 370 | 296 |
| 55° | 293 | 311 | 489 | 277 | 300 | 262 |
| 65° | 196 | 204 | 268 | 189 | 213 | 194 |
| 75° | 100 | 104 | 120 | 100 | 112 | 105 |
| 85° | 22 | 25 | 23 | 25 | 25 | 25 |
| 90° | 31 | 25 | 1 | 25 | 31 | 15 |
| 95° | 39 | 32 | 63 | 32 | 39 | 33 |
| 105° | 46 | 227 | 309 | 227 | 46 | 95 |
| 115° | 609 | 595 | 579 | 595 | 609 | 573 |
| 125° | 833 | 829 | 816 | 829 | 833 | 744 |
| 135° | 1027 | 1027 | 1016 | 1027 | 1027 | 792 |
| 145° | 1184 | 1182 | 1173 | 1182 | 1184 | 739 |
| 155° | 1290 | 1291 | 1292 | 1291 | 1290 | 595 |
| 165° | 1359 | 1358 | 1362 | 1358 | 1359 | 384 |
| 175° | 1389 | 1390 | 1394 | 1390 | 1389 | 132 |
| 180° | 1394 | 1394 | 1394 | 1394 | 1394 | |



TEST NUMBER: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 |
| 2.5° | 1622.3 | 1620.7 | 1619.0 | 1610.6 | 1602.3 | 1598.3 | 1594.3 | 1582.3 | 1570.2 | 1556.9 | 1543.5 |
| 5° | 1813.4 | 1818.0 | 1822.7 | 1817.4 | 1812.0 | 1795.7 | 1779.3 | 1757.6 | 1735.9 | 1711.5 | 1687.1 |
| 7.5° | 1901.5 | 1904.2 | 1906.9 | 1903.5 | 1900.2 | 1895.8 | 1891.5 | 1872.1 | 1852.8 | 1827.7 | 1802.7 |
| 10° | 1810.0 | 1816.0 | 1822.0 | 1835.1 | 1848.1 | 1862.8 | 1877.5 | 1874.8 | 1872.1 | 1864.8 | 1857.4 |
| 12.5° | 1609.0 | 1616.3 | 1623.7 | 1649.7 | 1675.8 | 1709.2 | 1742.6 | 1771.3 | 1800.0 | 1820.0 | 1840.1 |
| 15° | 1337.1 | 1357.5 | 1377.9 | 1401.6 | 1425.3 | 1474.4 | 1523.5 | 1583.9 | 1644.4 | 1698.1 | 1751.9 |
| 17.5° | 1101.4 | 1109.1 | 1116.7 | 1142.1 | 1167.5 | 1229.3 | 1291.1 | 1360.8 | 1430.6 | 1519.8 | 1609.0 |
| 20° | 906.3 | 913.4 | 920.4 | 953.8 | 987.2 | 1035.6 | 1084.0 | 1162.5 | 1241.0 | 1336.8 | 1432.6 |
| 22.5° | 761.4 | 772.4 | 783.4 | 802.1 | 820.9 | 867.3 | 913.7 | 983.5 | 1053.3 | 1159.1 | 1265.0 |
| 25° | 666.6 | 674.6 | 682.6 | 693.9 | 705.3 | 742.4 | 779.4 | 836.9 | 894.3 | 991.5 | 1088.7 |
| 27.5° | 601.8 | 605.1 | 608.5 | 619.8 | 631.2 | 655.2 | 679.3 | 728.7 | 778.1 | 860.6 | 943.1 |
| 30° | 551.0 | 553.4 | 555.7 | 565.7 | 575.7 | 592.1 | 608.5 | 644.2 | 679.9 | 752.7 | 825.5 |
| 32.5° | 515.6 | 517.3 | 519.0 | 526.6 | 534.3 | 546.0 | 557.7 | 583.7 | 609.8 | 669.9 | 730.0 |
| 35° | 483.6 | 484.6 | 485.6 | 491.2 | 496.9 | 505.6 | 514.3 | 534.0 | 553.7 | 601.1 | 648.5 |
| 37.5° | 455.5 | 456.8 | 458.2 | 461.5 | 464.9 | 472.5 | 480.2 | 495.9 | 511.6 | 548.0 | 584.4 |
| 40° | 428.1 | 430.5 | 432.8 | 435.1 | 437.5 | 443.8 | 450.2 | 462.2 | 474.2 | 504.3 | 534.3 |
| 42.5° | 404.7 | 407.1 | 409.4 | 410.4 | 411.4 | 415.1 | 418.8 | 429.8 | 440.8 | 463.2 | 485.6 |
| 45° | 382.0 | 383.0 | 384.0 | 385.0 | 386.0 | 389.1 | 392.1 | 401.7 | 411.4 | 430.8 | 450.2 |
| 47.5° | 361.3 | 361.3 | 361.3 | 362.0 | 362.7 | 365.3 | 368.0 | 375.0 | 382.0 | 397.1 | 412.1 |
| 50° | 341.3 | 341.3 | 341.3 | 340.3 | 339.3 | 341.0 | 342.6 | 348.0 | 353.3 | 366.7 | 380.0 |
| 52.5° | 317.3 | 317.3 | 317.3 | 317.6 | 317.9 | 317.9 | 317.9 | 322.6 | 327.3 | 339.3 | 351.3 |
| 55° | 293.2 | 294.5 | 295.9 | 294.9 | 293.9 | 294.5 | 295.2 | 298.2 | 301.2 | 310.9 | 320.6 |
| 57.5° | 269.2 | 269.8 | 270.5 | 270.2 | 269.8 | 270.2 | 270.5 | 273.2 | 275.8 | 283.2 | 290.5 |
| 60° | 246.5 | 246.5 | 246.5 | 245.8 | 245.1 | 245.8 | 246.5 | 247.8 | 249.1 | 255.8 | 262.5 |
| 62.5° | 221.1 | 221.4 | 221.7 | 222.1 | 222.4 | 221.7 | 221.1 | 222.7 | 224.4 | 229.4 | 234.4 |
| 65° | 195.7 | 196.0 | 196.4 | 197.4 | 198.4 | 197.7 | 197.0 | 198.7 | 200.4 | 204.0 | 207.7 |
| 67.5° | 173.0 | 172.3 | 171.7 | 172.0 | 172.3 | 173.3 | 174.3 | 174.7 | 175.0 | 179.0 | 183.0 |
| 70° | 146.3 | 146.9 | 147.6 | 147.3 | 146.9 | 147.3 | 147.6 | 148.6 | 149.6 | 152.6 | 155.6 |
| 72.5° | 122.2 | 122.6 | 122.9 | 122.9 | 122.9 | 123.6 | 124.2 | 125.2 | 126.2 | 127.9 | 129.6 |
| 75° | 100.2 | 100.2 | 100.2 | 100.9 | 101.5 | 101.9 | 102.2 | 102.2 | 102.2 | 103.5 | 104.9 |
| 77.5° | 76.1 | 77.8 | 79.5 | 79.1 | 78.8 | 79.5 | 80.1 | 81.2 | 82.2 | 82.8 | 83.5 |
| 80° | 55.4 | 55.4 | 55.4 | 55.8 | 56.1 | 57.1 | 58.1 | 58.8 | 59.4 | 60.8 | 62.1 |
| 82.5° | 35.4 | 35.7 | 36.1 | 37.1 | 38.1 | 38.7 | 39.4 | 40.4 | 41.4 | 41.4 | 41.4 |
| 85° | 22.0 | 21.4 | 20.7 | 21.4 | 22.0 | 22.7 | 23.4 | 23.7 | 24.0 | 24.7 | 25.4 |
| 87.5° | 10.7 | 10.7 | 10.7 | 10.7 | 10.7 | 11.0 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 |
| 90° | 31.1 | 30.6 | 30.2 | 29.7 | 29.2 | 28.5 | 27.6 | 26.7 | 25.8 | 24.9 | 21.9 |
| 92.5° | 35.2 | 35.0 | 34.8 | 34.5 | 34.3 | 33.4 | 31.8 | 30.2 | 28.5 | 26.9 | 24.9 |
| 95° | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 | 38.6 | 37.0 | 35.3 | 33.7 | 32.1 | 29.6 |
| 97.5° | 42.5 | 42.2 | 42.0 | 41.8 | 41.6 | 40.5 | 38.7 | 36.8 | 35.0 | 33.2 | 44.9 |
| 100° | 43.5 | 43.3 | 43.1 | 42.8 | 42.6 | 41.6 | 39.7 | 37.9 | 36.0 | 34.2 | 70.1 |
| 102.5° | 44.5 | 44.1 | 43.6 | 43.2 | 42.7 | 46.3 | 53.9 | 61.5 | 69.1 | 76.7 | 116.7 |
| 105° | 45.6 | 45.1 | 44.7 | 44.2 | 43.7 | 63.9 | 104.6 | 145.4 | 186.1 | 226.9 | 247.6 |
| 107.5° | 107.7 | 137.9 | 168.1 | 198.2 | 228.4 | 261.2 | 296.6 | 332.1 | 367.5 | 403.0 | 399.5 |
| 110° | 284.9 | 317.8 | 350.7 | 383.7 | 416.6 | 436.8 | 444.4 | 452.0 | 459.6 | 467.2 | 464.7 |



TEST NUMBER: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 539.8 | 540.2 | 540.7 | 541.1 | 541.6 | 540.8 | 538.7 | 536.6 | 534.6 | 532.5 | 530.0 |
| 115° | 609.2 | 608.2 | 607.3 | 606.4 | 605.5 | 603.9 | 601.6 | 599.3 | 597.0 | 594.7 | 592.6 |
| 117.5° | 665.1 | 664.9 | 664.7 | 664.4 | 664.2 | 663.2 | 661.3 | 659.5 | 657.6 | 655.8 | 654.6 |
| 120° | 723.1 | 723.1 | 723.1 | 723.1 | 723.1 | 722.2 | 720.4 | 718.5 | 716.7 | 714.8 | 714.1 |
| 122.5° | 780.1 | 779.9 | 779.6 | 779.4 | 779.2 | 778.5 | 777.3 | 776.2 | 775.0 | 773.9 | 773.0 |
| 125° | 832.9 | 832.5 | 832.0 | 831.6 | 831.1 | 830.6 | 830.2 | 829.7 | 829.3 | 828.8 | 827.9 |
| 127.5° | 884.7 | 885.2 | 885.7 | 886.1 | 886.6 | 886.5 | 885.8 | 885.1 | 884.4 | 883.7 | 882.6 |
| 130° | 934.5 | 934.9 | 935.4 | 935.9 | 936.3 | 936.1 | 935.2 | 934.2 | 933.3 | 932.4 | 931.5 |
| 132.5° | 980.1 | 980.7 | 981.4 | 982.1 | 982.8 | 982.7 | 981.8 | 980.9 | 979.9 | 979.0 | 978.3 |
| 135° | 1026.7 | 1027.4 | 1028.1 | 1028.7 | 1029.4 | 1029.4 | 1028.7 | 1028.1 | 1027.4 | 1026.7 | 1025.8 |
| 137.5° | 1071.2 | 1071.7 | 1072.1 | 1072.6 | 1073.1 | 1072.7 | 1071.6 | 1070.4 | 1069.3 | 1068.1 | 1067.7 |
| 140° | 1110.6 | 1111.1 | 1111.5 | 1112.0 | 1112.4 | 1112.2 | 1111.3 | 1110.4 | 1109.4 | 1108.5 | 1107.8 |
| 142.5° | 1146.8 | 1147.5 | 1148.2 | 1148.9 | 1149.6 | 1149.6 | 1148.9 | 1148.2 | 1147.5 | 1146.8 | 1146.2 |
| 145° | 1184.1 | 1184.1 | 1184.1 | 1184.1 | 1184.1 | 1183.9 | 1183.5 | 1183.0 | 1182.5 | 1182.1 | 1181.6 |
| 147.5° | 1211.1 | 1212.2 | 1213.4 | 1214.5 | 1215.7 | 1216.0 | 1215.6 | 1215.1 | 1214.7 | 1214.2 | 1213.7 |
| 150° | 1242.2 | 1242.9 | 1243.5 | 1244.2 | 1244.9 | 1245.0 | 1244.6 | 1244.1 | 1243.7 | 1243.2 | 1242.7 |
| 152.5° | 1267.0 | 1268.2 | 1269.3 | 1270.5 | 1271.6 | 1271.7 | 1270.8 | 1269.9 | 1269.0 | 1268.1 | 1267.8 |
| 155° | 1289.8 | 1291.2 | 1292.6 | 1294.0 | 1295.3 | 1295.5 | 1294.3 | 1293.2 | 1292.0 | 1290.9 | 1290.6 |
| 157.5° | 1309.5 | 1311.3 | 1313.2 | 1315.0 | 1316.9 | 1317.1 | 1315.7 | 1314.3 | 1313.0 | 1311.6 | 1311.8 |
| 160° | 1328.1 | 1329.8 | 1331.4 | 1333.0 | 1334.6 | 1334.7 | 1333.3 | 1331.9 | 1330.6 | 1329.2 | 1329.4 |
| 162.5° | 1345.8 | 1347.1 | 1348.5 | 1349.9 | 1351.3 | 1351.2 | 1349.6 | 1347.9 | 1346.3 | 1344.7 | 1345.0 |
| 165° | 1359.2 | 1360.8 | 1362.5 | 1364.1 | 1365.7 | 1365.6 | 1363.7 | 1361.9 | 1360.0 | 1358.2 | 1358.4 |
| 167.5° | 1369.6 | 1371.4 | 1373.3 | 1375.1 | 1377.0 | 1377.0 | 1375.1 | 1373.3 | 1371.4 | 1369.6 | 1369.6 |
| 170° | 1378.9 | 1380.8 | 1382.6 | 1384.4 | 1386.3 | 1386.3 | 1384.4 | 1382.6 | 1380.8 | 1378.9 | 1378.9 |
| 172.5° | 1384.1 | 1386.2 | 1388.2 | 1390.3 | 1392.4 | 1392.5 | 1390.7 | 1388.8 | 1387.0 | 1385.1 | 1384.9 |
| 175° | 1389.3 | 1391.1 | 1393.0 | 1394.8 | 1396.6 | 1396.8 | 1395.1 | 1393.5 | 1391.9 | 1390.3 | 1390.1 |
| 177.5° | 1390.3 | 1392.6 | 1394.9 | 1397.2 | 1399.5 | 1399.7 | 1397.9 | 1396.1 | 1394.2 | 1392.4 | 1392.2 |
| 180° | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 |



TEST NUMBER: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 |
| 2.5° | 1539.5 | 1535.5 | 1520.8 | 1506.1 | 1489.4 | 1472.7 | 1460.4 | 1448.0 | 1429.6 | 1411.3 | 1396.2 |
| 5° | 1668.4 | 1649.7 | 1618.7 | 1587.6 | 1545.5 | 1503.4 | 1475.1 | 1446.7 | 1408.6 | 1370.5 | 1340.1 |
| 7.5° | 1770.6 | 1738.5 | 1695.1 | 1651.7 | 1596.6 | 1541.5 | 1489.4 | 1437.3 | 1379.2 | 1321.1 | 1273.7 |
| 10° | 1835.7 | 1814.0 | 1763.9 | 1713.8 | 1640.0 | 1566.2 | 1493.4 | 1420.6 | 1345.8 | 1271.0 | 1208.2 |
| 12.5° | 1842.1 | 1844.1 | 1798.0 | 1751.9 | 1668.4 | 1584.9 | 1496.4 | 1407.9 | 1313.8 | 1219.6 | 1146.5 |
| 15° | 1786.3 | 1820.7 | 1795.3 | 1769.9 | 1685.8 | 1601.6 | 1492.8 | 1383.9 | 1275.4 | 1166.8 | 1082.3 |
| 17.5° | 1682.8 | 1756.6 | 1760.3 | 1763.9 | 1679.8 | 1595.6 | 1475.1 | 1354.5 | 1231.6 | 1108.7 | 1019.9 |
| 20° | 1541.5 | 1650.4 | 1687.8 | 1725.2 | 1656.7 | 1588.3 | 1458.7 | 1329.1 | 1191.5 | 1053.9 | 960.8 |
| 22.5° | 1397.3 | 1529.5 | 1598.0 | 1666.4 | 1615.7 | 1564.9 | 1427.0 | 1289.1 | 1143.8 | 998.5 | 904.0 |
| 25° | 1232.9 | 1377.2 | 1482.4 | 1587.6 | 1556.5 | 1525.5 | 1389.6 | 1253.7 | 1099.0 | 944.4 | 847.9 |
| 27.5° | 1089.7 | 1236.3 | 1363.2 | 1490.1 | 1483.4 | 1476.7 | 1341.8 | 1206.9 | 1048.6 | 890.3 | 797.1 |
| 30° | 962.1 | 1098.7 | 1240.6 | 1382.6 | 1398.9 | 1415.3 | 1285.0 | 1154.8 | 996.2 | 837.5 | 747.7 |
| 32.5° | 849.2 | 968.5 | 1120.7 | 1273.0 | 1305.1 | 1337.1 | 1219.6 | 1102.0 | 945.1 | 788.1 | 701.6 |
| 35° | 756.7 | 864.9 | 1017.2 | 1169.5 | 1209.6 | 1249.6 | 1147.5 | 1045.3 | 892.3 | 739.4 | 656.9 |
| 37.5° | 674.9 | 765.4 | 914.0 | 1062.6 | 1111.7 | 1160.8 | 1069.3 | 977.8 | 834.5 | 691.3 | 615.5 |
| 40° | 607.1 | 679.9 | 816.5 | 953.1 | 1009.9 | 1066.6 | 991.2 | 915.7 | 779.8 | 643.9 | 574.1 |
| 42.5° | 550.4 | 615.1 | 739.0 | 862.9 | 917.4 | 971.8 | 908.0 | 844.2 | 723.3 | 602.4 | 538.7 |
| 45° | 501.9 | 553.7 | 666.2 | 778.8 | 830.5 | 882.3 | 827.5 | 772.8 | 666.2 | 559.7 | 500.3 |
| 47.5° | 456.5 | 500.9 | 597.1 | 693.3 | 739.4 | 785.5 | 742.7 | 700.0 | 609.8 | 519.6 | 465.9 |
| 50° | 415.8 | 451.5 | 535.7 | 619.8 | 659.9 | 700.0 | 662.2 | 624.5 | 550.4 | 476.2 | 429.5 |
| 52.5° | 380.4 | 409.4 | 479.9 | 550.4 | 584.7 | 619.1 | 586.8 | 554.4 | 495.6 | 436.8 | 396.1 |
| 55° | 345.3 | 370.0 | 431.1 | 492.2 | 515.6 | 539.0 | 514.0 | 488.9 | 441.5 | 394.1 | 359.7 |
| 57.5° | 312.6 | 334.6 | 384.7 | 434.8 | 452.8 | 470.9 | 448.2 | 425.5 | 389.7 | 354.0 | 325.3 |
| 60° | 280.5 | 298.6 | 340.3 | 382.0 | 393.1 | 404.1 | 385.7 | 367.3 | 342.3 | 317.3 | 291.5 |
| 62.5° | 250.8 | 267.2 | 298.2 | 329.3 | 336.6 | 344.0 | 329.9 | 315.9 | 296.9 | 277.8 | 257.8 |
| 65° | 220.1 | 232.4 | 257.8 | 283.2 | 287.9 | 292.5 | 280.2 | 267.8 | 253.5 | 239.1 | 224.4 |
| 67.5° | 191.7 | 200.4 | 221.1 | 241.8 | 242.1 | 242.4 | 232.4 | 222.4 | 214.4 | 206.4 | 194.7 |
| 70° | 164.0 | 172.3 | 186.0 | 199.7 | 200.0 | 200.4 | 192.4 | 184.3 | 178.3 | 172.3 | 163.6 |
| 72.5° | 135.6 | 141.6 | 151.9 | 162.3 | 161.6 | 161.0 | 156.0 | 150.9 | 146.3 | 141.6 | 135.3 |
| 75° | 109.9 | 114.9 | 121.9 | 128.9 | 126.9 | 124.9 | 122.2 | 119.6 | 115.5 | 111.5 | 107.5 |
| 77.5° | 86.5 | 89.5 | 93.5 | 97.5 | 96.2 | 94.8 | 92.5 | 90.2 | 87.2 | 84.2 | 82.5 |
| 80° | 63.5 | 64.8 | 67.5 | 70.1 | 69.5 | 68.8 | 66.1 | 63.5 | 62.8 | 62.1 | 59.8 |
| 82.5° | 43.1 | 44.7 | 45.4 | 46.1 | 45.8 | 45.4 | 43.4 | 41.4 | 40.7 | 40.1 | 39.7 |
| 85° | 25.7 | 26.0 | 26.4 | 26.7 | 25.7 | 24.7 | 24.0 | 23.4 | 23.4 | 23.4 | 23.0 |
| 87.5° | 11.7 | 12.0 | 12.0 | 12.0 | 11.7 | 11.4 | 10.7 | 10.0 | 10.4 | 10.7 | 10.7 |
| 90° | 18.9 | 15.9 | 12.9 | 10.2 | 7.9 | 5.6 | 3.3 | 1.0 | 3.3 | 5.6 | 7.9 |
| 92.5° | 22.8 | 20.7 | 18.6 | 18.3 | 19.7 | 21.1 | 22.4 | 23.8 | 22.4 | 21.1 | 19.7 |
| 95° | 27.1 | 24.5 | 22.0 | 25.4 | 34.9 | 44.3 | 53.8 | 63.2 | 53.8 | 44.3 | 34.9 |
| 97.5° | 56.6 | 68.4 | 80.1 | 89.2 | 95.7 | 102.1 | 108.5 | 115.0 | 108.5 | 102.1 | 95.7 |
| 100° | 106.0 | 141.9 | 177.8 | 193.5 | 188.9 | 184.3 | 179.7 | 175.1 | 179.7 | 184.3 | 188.9 |
| 102.5° | 156.8 | 196.8 | 236.9 | 255.4 | 252.4 | 249.4 | 246.5 | 243.5 | 246.5 | 249.4 | 252.4 |
| 105° | 268.3 | 289.0 | 309.8 | 318.9 | 316.3 | 313.8 | 311.3 | 308.7 | 311.3 | 313.8 | 316.3 |
| 107.5° | 396.1 | 392.6 | 389.2 | 386.4 | 384.4 | 382.3 | 380.2 | 378.1 | 380.2 | 382.3 | 384.4 |
| 110° | 462.2 | 459.6 | 457.1 | 454.9 | 453.1 | 451.2 | 449.4 | 447.6 | 449.4 | 451.2 | 453.1 |



TEST NUMBER: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 527.4 | 524.9 | 522.4 | 520.3 | 518.7 | 517.1 | 515.5 | 513.9 | 515.5 | 517.1 | 518.7 |
| 115° | 590.5 | 588.4 | 586.4 | 584.6 | 583.3 | 581.9 | 580.5 | 579.1 | 580.5 | 581.9 | 583.3 |
| 117.5° | 653.5 | 652.3 | 651.2 | 649.8 | 648.2 | 646.6 | 645.0 | 643.4 | 645.0 | 646.6 | 648.2 |
| 120° | 713.5 | 712.8 | 712.1 | 710.7 | 708.6 | 706.6 | 704.5 | 702.4 | 704.5 | 706.6 | 708.6 |
| 122.5° | 772.0 | 771.1 | 770.2 | 768.9 | 767.3 | 765.7 | 764.1 | 762.5 | 764.1 | 765.7 | 767.3 |
| 125° | 827.0 | 826.0 | 825.1 | 823.7 | 821.9 | 820.0 | 818.2 | 816.4 | 818.2 | 820.0 | 821.9 |
| 127.5° | 881.4 | 880.3 | 879.1 | 877.6 | 875.8 | 873.9 | 872.1 | 870.2 | 872.1 | 873.9 | 875.8 |
| 130° | 930.6 | 929.6 | 928.7 | 927.3 | 925.5 | 923.6 | 921.8 | 920.0 | 921.8 | 923.6 | 925.5 |
| 132.5° | 977.6 | 976.9 | 976.3 | 975.0 | 973.1 | 971.3 | 969.5 | 967.6 | 969.5 | 971.3 | 973.1 |
| 135° | 1024.8 | 1023.9 | 1023.0 | 1021.8 | 1020.5 | 1019.1 | 1017.7 | 1016.3 | 1017.7 | 1019.1 | 1020.5 |
| 137.5° | 1067.2 | 1066.7 | 1066.3 | 1065.1 | 1063.3 | 1061.4 | 1059.6 | 1057.8 | 1059.6 | 1061.4 | 1063.3 |
| 140° | 1107.1 | 1106.4 | 1105.8 | 1104.7 | 1103.3 | 1102.0 | 1100.6 | 1099.2 | 1100.6 | 1102.0 | 1103.3 |
| 142.5° | 1145.5 | 1144.8 | 1144.1 | 1143.1 | 1141.7 | 1140.3 | 1138.9 | 1137.5 | 1138.9 | 1140.3 | 1141.7 |
| 145° | 1181.2 | 1180.7 | 1180.2 | 1179.2 | 1177.6 | 1176.0 | 1174.4 | 1172.7 | 1174.4 | 1176.0 | 1177.6 |
| 147.5° | 1213.3 | 1212.8 | 1212.3 | 1211.5 | 1210.4 | 1209.2 | 1208.1 | 1206.9 | 1208.1 | 1209.2 | 1210.4 |
| 150° | 1242.3 | 1241.8 | 1241.4 | 1240.8 | 1240.1 | 1239.4 | 1238.7 | 1238.0 | 1238.7 | 1239.4 | 1240.1 |
| 152.5° | 1267.6 | 1267.4 | 1267.1 | 1266.9 | 1266.7 | 1266.4 | 1266.2 | 1266.0 | 1266.2 | 1266.4 | 1266.7 |
| 155° | 1290.4 | 1290.2 | 1289.9 | 1290.0 | 1290.5 | 1291.0 | 1291.4 | 1291.9 | 1291.4 | 1291.0 | 1290.5 |
| 157.5° | 1312.0 | 1312.3 | 1312.5 | 1312.6 | 1312.6 | 1312.6 | 1312.6 | 1312.6 | 1312.6 | 1312.6 | 1312.6 |
| 160° | 1329.6 | 1329.9 | 1330.1 | 1330.3 | 1330.6 | 1330.8 | 1331.0 | 1331.3 | 1331.0 | 1330.8 | 1330.6 |
| 162.5° | 1345.2 | 1345.4 | 1345.6 | 1346.1 | 1346.8 | 1347.5 | 1348.2 | 1348.9 | 1348.2 | 1347.5 | 1346.8 |
| 165° | 1358.7 | 1358.9 | 1359.1 | 1359.6 | 1360.3 | 1361.0 | 1361.6 | 1362.3 | 1361.6 | 1361.0 | 1360.3 |
| 167.5° | 1369.6 | 1369.6 | 1369.6 | 1370.0 | 1371.0 | 1371.9 | 1372.8 | 1373.7 | 1372.8 | 1371.9 | 1371.0 |
| 170° | 1378.9 | 1378.9 | 1378.9 | 1379.4 | 1380.3 | 1381.2 | 1382.1 | 1383.1 | 1382.1 | 1381.2 | 1380.3 |
| 172.5° | 1384.7 | 1384.4 | 1384.2 | 1384.7 | 1385.8 | 1387.0 | 1388.1 | 1389.3 | 1388.1 | 1387.0 | 1385.8 |
| 175° | 1389.8 | 1389.6 | 1389.4 | 1389.8 | 1391.0 | 1392.2 | 1393.3 | 1394.5 | 1393.3 | 1392.2 | 1391.0 |
| 177.5° | 1391.9 | 1391.7 | 1391.5 | 1391.9 | 1393.1 | 1394.2 | 1395.4 | 1396.5 | 1395.4 | 1394.2 | 1393.1 |
| 180° | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 |



TEST NUMBER: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 | 1439.3 |
| 2.5° | 1381.2 | 1368.2 | 1355.2 | 1345.2 | 1335.1 | 1318.1 | 1301.1 | 1297.1 | 1293.1 | 1287.4 | 1281.7 |
| 5° | 1309.8 | 1277.7 | 1245.6 | 1216.9 | 1188.2 | 1165.8 | 1143.4 | 1128.8 | 1114.1 | 1103.4 | 1092.7 |
| 7.5° | 1226.3 | 1178.2 | 1130.1 | 1096.0 | 1062.0 | 1029.6 | 997.2 | 986.8 | 976.5 | 962.4 | 948.4 |
| 10° | 1145.5 | 1092.4 | 1039.3 | 994.8 | 950.4 | 918.7 | 887.0 | 874.3 | 861.6 | 843.9 | 826.2 |
| 12.5° | 1073.3 | 1015.2 | 957.1 | 912.4 | 867.6 | 836.9 | 806.2 | 787.8 | 769.4 | 759.4 | 749.4 |
| 15° | 997.8 | 935.7 | 873.6 | 832.2 | 790.8 | 763.1 | 735.4 | 719.3 | 703.3 | 693.6 | 683.9 |
| 17.5° | 931.1 | 869.6 | 808.2 | 768.4 | 728.7 | 703.3 | 677.9 | 663.9 | 649.9 | 642.5 | 635.2 |
| 20° | 867.6 | 807.5 | 747.4 | 708.6 | 669.9 | 649.2 | 628.5 | 619.5 | 610.5 | 604.5 | 598.4 |
| 22.5° | 809.5 | 750.4 | 691.3 | 658.2 | 625.2 | 608.5 | 591.8 | 585.4 | 579.1 | 574.1 | 569.1 |
| 25° | 751.4 | 698.6 | 645.9 | 617.8 | 589.8 | 576.1 | 562.4 | 556.0 | 549.7 | 544.7 | 539.7 |
| 27.5° | 704.0 | 653.5 | 603.1 | 579.1 | 555.0 | 544.3 | 533.7 | 528.6 | 523.6 | 519.0 | 514.3 |
| 30° | 657.9 | 612.8 | 567.7 | 547.0 | 526.3 | 516.6 | 506.9 | 501.9 | 496.9 | 492.6 | 488.2 |
| 32.5° | 615.1 | 576.4 | 537.7 | 518.6 | 499.6 | 491.6 | 483.6 | 477.5 | 471.5 | 468.2 | 464.9 |
| 35° | 574.4 | 539.7 | 504.9 | 489.2 | 473.5 | 465.5 | 457.5 | 452.5 | 447.5 | 444.8 | 442.2 |
| 37.5° | 539.7 | 508.6 | 477.5 | 462.5 | 447.5 | 439.8 | 432.1 | 427.8 | 423.4 | 422.4 | 421.4 |
| 40° | 504.3 | 477.5 | 450.8 | 436.1 | 421.4 | 414.8 | 408.1 | 405.4 | 402.7 | 402.1 | 401.4 |
| 42.5° | 474.9 | 448.8 | 422.8 | 409.4 | 396.1 | 390.4 | 384.7 | 383.4 | 382.0 | 383.0 | 384.0 |
| 45° | 440.8 | 419.1 | 397.4 | 385.0 | 372.7 | 368.0 | 363.3 | 362.3 | 361.3 | 363.3 | 365.3 |
| 47.5° | 412.1 | 392.1 | 372.0 | 360.3 | 348.6 | 345.3 | 342.0 | 341.6 | 341.3 | 344.0 | 346.6 |
| 50° | 382.7 | 363.3 | 344.0 | 334.6 | 325.3 | 322.3 | 319.3 | 320.3 | 321.3 | 325.6 | 329.9 |
| 52.5° | 355.3 | 337.3 | 319.3 | 310.6 | 301.9 | 299.9 | 297.9 | 300.2 | 302.6 | 307.2 | 311.9 |
| 55° | 325.3 | 308.9 | 292.5 | 285.9 | 279.2 | 277.2 | 275.2 | 279.9 | 284.5 | 288.9 | 293.2 |
| 57.5° | 296.5 | 282.2 | 267.8 | 261.8 | 255.8 | 255.5 | 255.1 | 259.5 | 263.8 | 268.5 | 273.2 |
| 60° | 265.8 | 253.8 | 241.8 | 237.1 | 232.4 | 233.1 | 233.8 | 238.8 | 243.8 | 247.5 | 251.1 |
| 62.5° | 237.8 | 227.8 | 217.7 | 213.4 | 209.1 | 210.7 | 212.4 | 217.4 | 222.4 | 226.8 | 231.1 |
| 65° | 209.7 | 201.4 | 193.0 | 190.0 | 187.0 | 189.4 | 191.7 | 196.0 | 200.4 | 203.4 | 206.4 |
| 67.5° | 183.0 | 176.0 | 169.0 | 166.6 | 164.3 | 166.6 | 169.0 | 173.3 | 177.7 | 180.7 | 183.7 |
| 70° | 155.0 | 149.3 | 143.6 | 141.9 | 140.3 | 142.9 | 145.6 | 149.3 | 152.9 | 156.0 | 159.0 |
| 72.5° | 128.9 | 124.6 | 120.2 | 119.9 | 119.6 | 121.9 | 124.2 | 127.9 | 131.6 | 133.6 | 135.6 |
| 75° | 103.5 | 101.2 | 98.8 | 98.5 | 98.2 | 100.5 | 102.9 | 104.9 | 106.9 | 108.5 | 110.2 |
| 77.5° | 80.8 | 78.8 | 76.8 | 77.1 | 77.5 | 79.1 | 80.8 | 82.8 | 84.8 | 85.8 | 86.8 |
| 80° | 57.4 | 56.8 | 56.1 | 56.8 | 57.4 | 58.8 | 60.1 | 61.4 | 62.8 | 63.5 | 64.1 |
| 82.5° | 39.4 | 38.7 | 38.1 | 39.1 | 40.1 | 41.1 | 42.1 | 43.1 | 44.1 | 44.4 | 44.7 |
| 85° | 22.7 | 23.7 | 24.7 | 24.7 | 24.7 | 25.0 | 25.4 | 25.7 | 26.0 | 25.7 | 25.4 |
| 87.5° | 10.7 | 11.0 | 11.4 | 11.4 | 11.4 | 11.7 | 12.0 | 12.0 | 12.0 | 11.7 | 11.4 |
| 90° | 10.2 | 12.9 | 15.9 | 18.9 | 21.9 | 24.9 | 25.8 | 26.7 | 27.6 | 28.5 | 29.2 |
| 92.5° | 18.3 | 18.6 | 20.7 | 22.8 | 24.9 | 26.9 | 28.5 | 30.2 | 31.8 | 33.4 | 34.3 |
| 95° | 25.4 | 22.0 | 24.5 | 27.1 | 29.6 | 32.1 | 33.7 | 35.3 | 37.0 | 38.6 | 39.4 |
| 97.5° | 89.2 | 80.1 | 68.4 | 56.6 | 44.9 | 33.2 | 35.0 | 36.8 | 38.7 | 40.5 | 41.6 |
| 100° | 193.5 | 177.8 | 141.9 | 106.0 | 70.1 | 34.2 | 36.0 | 37.9 | 39.7 | 41.6 | 42.6 |
| 102.5° | 255.4 | 236.9 | 196.8 | 156.8 | 116.7 | 76.7 | 69.1 | 61.5 | 53.9 | 46.3 | 42.7 |
| 105° | 318.9 | 309.8 | 289.0 | 268.3 | 247.6 | 226.9 | 186.1 | 145.4 | 104.6 | 63.9 | 43.7 |
| 107.5° | 386.4 | 389.2 | 392.6 | 396.1 | 399.5 | 403.0 | 367.5 | 332.1 | 296.6 | 261.2 | 228.4 |
| 110° | 454.9 | 457.1 | 459.6 | 462.2 | 464.7 | 467.2 | 459.6 | 452.0 | 444.4 | 436.8 | 416.6 |



TEST NUMBER: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 520.3 | 522.4 | 524.9 | 527.4 | 530.0 | 532.5 | 534.6 | 536.6 | 538.7 | 540.8 | 541.6 |
| 115° | 584.6 | 586.4 | 588.4 | 590.5 | 592.6 | 594.7 | 597.0 | 599.3 | 601.6 | 603.9 | 605.5 |
| 117.5° | 649.8 | 651.2 | 652.3 | 653.5 | 654.6 | 655.8 | 657.6 | 659.5 | 661.3 | 663.2 | 664.2 |
| 120° | 710.7 | 712.1 | 712.8 | 713.5 | 714.1 | 714.8 | 716.7 | 718.5 | 720.4 | 722.2 | 723.1 |
| 122.5° | 768.9 | 770.2 | 771.1 | 772.0 | 773.0 | 773.9 | 775.0 | 776.2 | 777.3 | 778.5 | 779.2 |
| 125° | 823.7 | 825.1 | 826.0 | 827.0 | 827.9 | 828.8 | 829.3 | 829.7 | 830.2 | 830.6 | 831.1 |
| 127.5° | 877.6 | 879.1 | 880.3 | 881.4 | 882.6 | 883.7 | 884.4 | 885.1 | 885.8 | 886.5 | 886.6 |
| 130° | 927.3 | 928.7 | 929.6 | 930.6 | 931.5 | 932.4 | 933.3 | 934.2 | 935.2 | 936.1 | 936.3 |
| 132.5° | 975.0 | 976.3 | 976.9 | 977.6 | 978.3 | 979.0 | 979.9 | 980.9 | 981.8 | 982.7 | 982.8 |
| 135° | 1021.8 | 1023.0 | 1023.9 | 1024.8 | 1025.8 | 1026.7 | 1027.4 | 1028.1 | 1028.7 | 1029.4 | 1029.4 |
| 137.5° | 1065.1 | 1066.3 | 1066.7 | 1067.2 | 1067.7 | 1068.1 | 1069.3 | 1070.4 | 1071.6 | 1072.7 | 1073.1 |
| 140° | 1104.7 | 1105.8 | 1106.4 | 1107.1 | 1107.8 | 1108.5 | 1109.4 | 1110.4 | 1111.3 | 1112.2 | 1112.4 |
| 142.5° | 1143.1 | 1144.1 | 1144.8 | 1145.5 | 1146.2 | 1146.8 | 1147.5 | 1148.2 | 1148.9 | 1149.6 | 1149.6 |
| 145° | 1179.2 | 1180.2 | 1180.7 | 1181.2 | 1181.6 | 1182.1 | 1182.5 | 1183.0 | 1183.5 | 1183.9 | 1184.1 |
| 147.5° | 1211.5 | 1212.3 | 1212.8 | 1213.3 | 1213.7 | 1214.2 | 1214.7 | 1215.1 | 1215.6 | 1216.0 | 1215.7 |
| 150° | 1240.8 | 1241.4 | 1241.8 | 1242.3 | 1242.7 | 1243.2 | 1243.7 | 1244.1 | 1244.6 | 1245.0 | 1244.9 |
| 152.5° | 1266.9 | 1267.1 | 1267.4 | 1267.6 | 1267.8 | 1268.1 | 1269.0 | 1269.9 | 1270.8 | 1271.7 | 1271.6 |
| 155° | 1290.0 | 1289.9 | 1290.2 | 1290.4 | 1290.6 | 1290.9 | 1292.0 | 1293.2 | 1294.3 | 1295.5 | 1295.3 |
| 157.5° | 1312.6 | 1312.5 | 1312.3 | 1312.0 | 1311.8 | 1311.6 | 1313.0 | 1314.3 | 1315.7 | 1317.1 | 1316.9 |
| 160° | 1330.3 | 1330.1 | 1329.9 | 1329.6 | 1329.4 | 1329.2 | 1330.6 | 1331.9 | 1333.3 | 1334.7 | 1334.6 |
| 162.5° | 1346.1 | 1345.6 | 1345.4 | 1345.2 | 1345.0 | 1344.7 | 1346.3 | 1347.9 | 1349.6 | 1351.2 | 1351.3 |
| 165° | 1359.6 | 1359.1 | 1358.9 | 1358.7 | 1358.4 | 1358.2 | 1360.0 | 1361.9 | 1363.7 | 1365.6 | 1365.7 |
| 167.5° | 1370.0 | 1369.6 | 1369.6 | 1369.6 | 1369.6 | 1369.6 | 1371.4 | 1373.3 | 1375.1 | 1377.0 | 1377.0 |
| 170° | 1379.4 | 1378.9 | 1378.9 | 1378.9 | 1378.9 | 1378.9 | 1380.8 | 1382.6 | 1384.4 | 1386.3 | 1386.3 |
| 172.5° | 1384.7 | 1384.2 | 1384.4 | 1384.7 | 1384.9 | 1385.1 | 1387.0 | 1388.8 | 1390.7 | 1392.5 | 1392.4 |
| 175° | 1389.8 | 1389.4 | 1389.6 | 1389.8 | 1390.1 | 1390.3 | 1391.9 | 1393.5 | 1395.1 | 1396.8 | 1396.6 |
| 177.5° | 1391.9 | 1391.5 | 1391.7 | 1391.9 | 1392.2 | 1392.4 | 1394.2 | 1396.1 | 1397.9 | 1399.7 | 1399.5 |
| 180° | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 | 1394.5 |



TEST NUMBER: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|--------|--------|--------|--------|--------|
| 0° | 1439.3 | 1439.3 | 1439.3 | 1439.3 |
| 2.5° | 1279.4 | 1277.0 | 1267.7 | 1258.3 |
| 5° | 1084.7 | 1076.7 | 1074.0 | 1071.3 |
| 7.5° | 947.8 | 947.1 | 933.1 | 919.0 |
| 10° | 827.2 | 828.2 | 815.5 | 802.8 |
| 12.5° | 741.0 | 732.7 | 731.7 | 730.7 |
| 15° | 676.3 | 668.6 | 667.2 | 665.9 |
| 17.5° | 630.5 | 625.8 | 624.5 | 623.2 |
| 20° | 595.8 | 593.1 | 590.8 | 588.4 |
| 22.5° | 565.7 | 562.4 | 560.4 | 558.4 |
| 25° | 536.7 | 533.7 | 533.0 | 532.3 |
| 27.5° | 510.6 | 506.9 | 506.9 | 506.9 |
| 30° | 485.9 | 483.6 | 482.6 | 481.6 |
| 32.5° | 462.9 | 460.9 | 460.9 | 460.9 |
| 35° | 441.1 | 440.1 | 438.8 | 437.5 |
| 37.5° | 421.4 | 421.4 | 420.8 | 420.1 |
| 40° | 402.4 | 403.4 | 403.4 | 403.4 |
| 42.5° | 385.0 | 386.0 | 386.0 | 386.0 |
| 45° | 367.0 | 368.7 | 369.3 | 370.0 |
| 47.5° | 349.3 | 352.0 | 352.7 | 353.3 |
| 50° | 331.9 | 334.0 | 334.3 | 334.6 |
| 52.5° | 314.2 | 316.6 | 318.3 | 319.9 |
| 55° | 295.5 | 297.9 | 298.9 | 299.9 |
| 57.5° | 275.5 | 277.8 | 278.2 | 278.5 |
| 60° | 253.5 | 255.8 | 256.5 | 257.1 |
| 62.5° | 232.4 | 233.8 | 234.4 | 235.1 |
| 65° | 208.4 | 210.4 | 211.7 | 213.1 |
| 67.5° | 185.3 | 187.0 | 187.0 | 187.0 |
| 70° | 159.6 | 160.3 | 161.3 | 162.3 |
| 72.5° | 135.9 | 136.3 | 136.3 | 136.3 |
| 75° | 110.9 | 111.5 | 111.9 | 112.2 |
| 77.5° | 87.2 | 87.5 | 87.5 | 87.5 |
| 80° | 63.8 | 63.5 | 63.5 | 63.5 |
| 82.5° | 43.7 | 42.7 | 42.7 | 42.7 |
| 85° | 25.0 | 24.7 | 25.0 | 25.4 |
| 87.5° | 11.4 | 11.4 | 11.4 | 11.4 |
| 90° | 29.7 | 30.2 | 30.6 | 31.1 |
| 92.5° | 34.5 | 34.8 | 35.0 | 35.2 |
| 95° | 39.4 | 39.4 | 39.4 | 39.4 |
| 97.5° | 41.8 | 42.0 | 42.2 | 42.5 |
| 100° | 42.8 | 43.1 | 43.3 | 43.5 |
| 102.5° | 43.2 | 43.6 | 44.1 | 44.5 |
| 105° | 44.2 | 44.7 | 45.1 | 45.6 |
| 107.5° | 198.2 | 168.1 | 137.9 | 107.7 |
| 110° | 383.7 | 350.7 | 317.8 | 284.9 |



TEST NUMBER: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|--------|--------|--------|--------|--------|
| 112.5° | 541.1 | 540.7 | 540.2 | 539.8 |
| 115° | 606.4 | 607.3 | 608.2 | 609.2 |
| 117.5° | 664.4 | 664.7 | 664.9 | 665.1 |
| 120° | 723.1 | 723.1 | 723.1 | 723.1 |
| 122.5° | 779.4 | 779.6 | 779.9 | 780.1 |
| 125° | 831.6 | 832.0 | 832.5 | 832.9 |
| 127.5° | 886.1 | 885.7 | 885.2 | 884.7 |
| 130° | 935.9 | 935.4 | 934.9 | 934.5 |
| 132.5° | 982.1 | 981.4 | 980.7 | 980.1 |
| 135° | 1028.7 | 1028.1 | 1027.4 | 1026.7 |
| 137.5° | 1072.6 | 1072.1 | 1071.7 | 1071.2 |
| 140° | 1112.0 | 1111.5 | 1111.1 | 1110.6 |
| 142.5° | 1148.9 | 1148.2 | 1147.5 | 1146.8 |
| 145° | 1184.1 | 1184.1 | 1184.1 | 1184.1 |
| 147.5° | 1214.5 | 1213.4 | 1212.2 | 1211.1 |
| 150° | 1244.2 | 1243.5 | 1242.9 | 1242.2 |
| 152.5° | 1270.5 | 1269.3 | 1268.2 | 1267.0 |
| 155° | 1294.0 | 1292.6 | 1291.2 | 1289.8 |
| 157.5° | 1315.0 | 1313.2 | 1311.3 | 1309.5 |
| 160° | 1333.0 | 1331.4 | 1329.8 | 1328.1 |
| 162.5° | 1349.9 | 1348.5 | 1347.1 | 1345.8 |
| 165° | 1364.1 | 1362.5 | 1360.8 | 1359.2 |
| 167.5° | 1375.1 | 1373.3 | 1371.4 | 1369.6 |
| 170° | 1384.4 | 1382.6 | 1380.8 | 1378.9 |
| 172.5° | 1390.3 | 1388.2 | 1386.2 | 1384.1 |
| 175° | 1394.8 | 1393.0 | 1391.1 | 1389.3 |
| 177.5° | 1397.2 | 1394.9 | 1392.6 | 1390.3 |
| 180° | 1394.5 | 1394.5 | 1394.5 | 1394.5 |



TEST NUMBER: P831498

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-G

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 | 11.53 | 12.25 | 12.61 | 13.33 | 14.80 | 13.77 | 14.49 | 14.85 | 15.56 | 17.03 |
| | 3H | 13.17 | 13.81 | 14.26 | 14.90 | 16.39 | 15.18 | 15.83 | 16.27 | 16.91 | 18.40 |
| | 4H | 13.74 | 14.35 | 14.84 | 15.44 | 16.93 | 15.63 | 16.24 | 16.73 | 17.32 | 18.82 |
| | 6H | 14.10 | 14.67 | 15.21 | 15.76 | 17.26 | 15.90 | 16.46 | 17.00 | 17.55 | 19.05 |
| | 8H | 14.20 | 14.73 | 15.31 | 15.84 | 17.34 | 15.95 | 16.49 | 17.07 | 17.59 | 19.09 |
| | 12H | 14.24 | 14.74 | 15.35 | 15.84 | 17.37 | 15.97 | 16.48 | 17.09 | 17.58 | 19.10 |
| 4H | 2H | 12.09 | 12.70 | 13.20 | 13.79 | 15.28 | 13.92 | 14.53 | 15.02 | 15.61 | 17.11 |
| | 3H | 13.91 | 14.42 | 15.02 | 15.53 | 17.04 | 15.52 | 16.03 | 16.63 | 17.14 | 18.65 |
| | 4H | 14.60 | 15.07 | 15.72 | 16.17 | 17.70 | 16.10 | 16.57 | 17.22 | 17.67 | 19.20 |
| | 6H | 15.07 | 15.47 | 16.19 | 16.59 | 18.11 | 16.50 | 16.90 | 17.62 | 18.02 | 19.54 |
| | 8H | 15.20 | 15.58 | 16.33 | 16.69 | 18.23 | 16.61 | 16.98 | 17.73 | 18.10 | 19.63 |
| | 12H | 15.26 | 15.60 | 16.40 | 16.73 | 18.27 | 16.65 | 16.98 | 17.79 | 18.11 | 19.65 |
| 8H | 4H | 14.86 | 15.23 | 15.98 | 16.35 | 17.88 | 16.20 | 16.57 | 17.32 | 17.69 | 19.22 |
| | 6H | 15.44 | 15.75 | 16.58 | 16.91 | 18.44 | 16.69 | 17.00 | 17.84 | 18.16 | 19.69 |
| | 8H | 15.65 | 15.92 | 16.80 | 17.06 | 18.61 | 16.87 | 17.14 | 18.02 | 18.28 | 19.83 |
| | 12H | 15.77 | 16.00 | 16.92 | 17.14 | 18.73 | 16.97 | 17.20 | 18.12 | 18.34 | 19.93 |
| 12H | 4H | 14.85 | 15.19 | 15.99 | 16.32 | 17.86 | 16.16 | 16.50 | 17.30 | 17.63 | 19.17 |
| | 6H | 15.49 | 15.76 | 16.64 | 16.90 | 18.45 | 16.71 | 16.98 | 17.86 | 18.12 | 19.67 |
| | 8H | 15.72 | 15.95 | 16.87 | 17.09 | 18.68 | 16.90 | 17.14 | 18.05 | 18.27 | 19.86 |