

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: P999511

Luminaire Tested: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P999511  
REPORT IS A COMBINATION OF REPORTS P988064 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K  
Description: Define 2 Regressed Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473}  
{m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

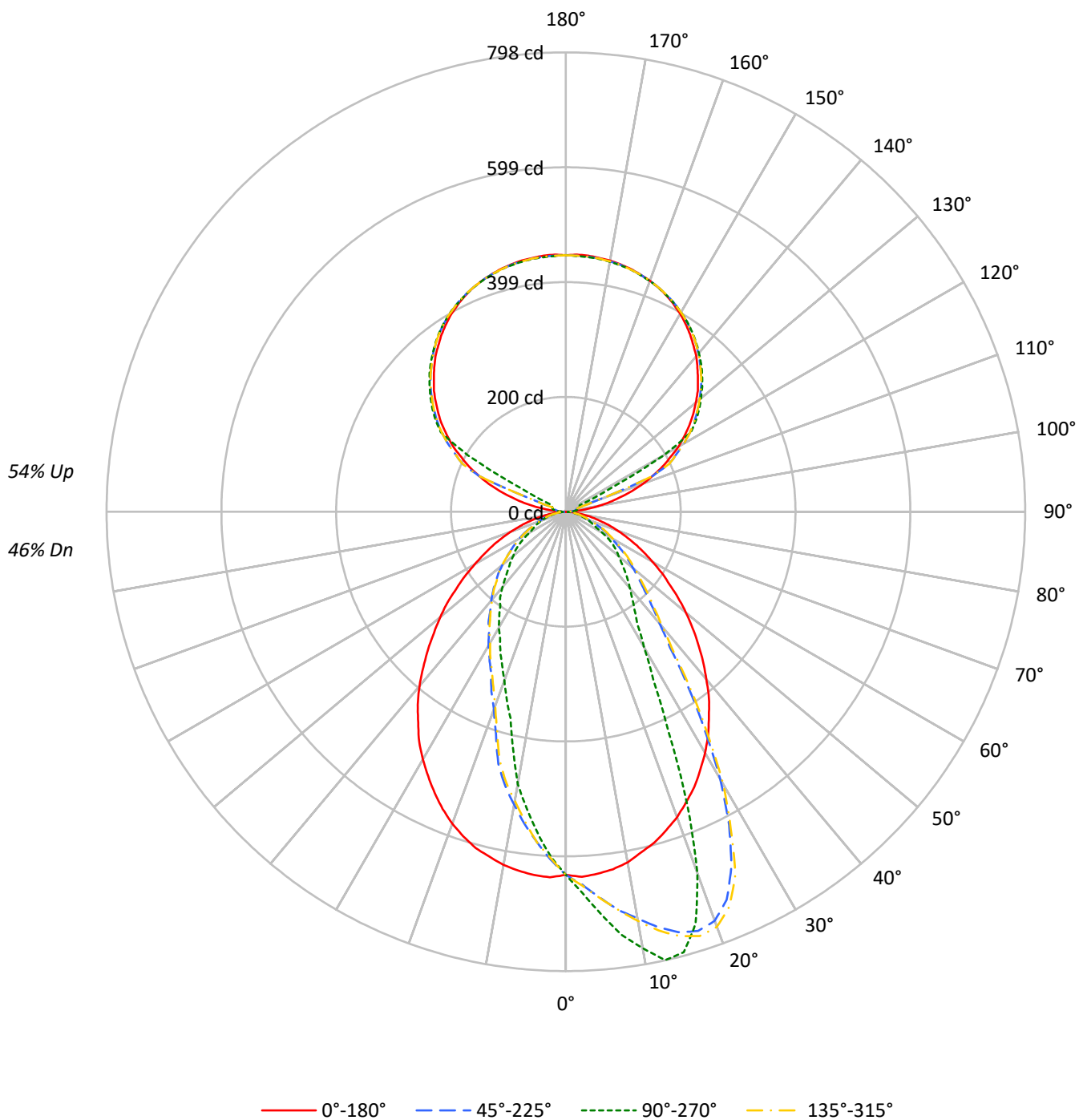
Lumens per Lamp: N/A  
Luminaire Lumens: 2397.0 lumens  
Efficiency: N/A  
Efficacy: 107.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 22.3  
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

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CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

### Luminous Intensity Polar Plot



TEST NUMBER: P999511

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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20 |    |    |    |    | 20 |    |    |    |    | 20 |    |    |    |    | 20 |
| RC  | 80  |     |     |     | 70 |    |    |    |    | 50 |    |    |    |    | 30 |    |    |    |    | 10 |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 81 | 81 | 81 | 66 | 66 | 66 | 52 | 52 | 52 | 46 | 46 | 46 |
| 1   | 97  | 93  | 90  | 87  | 89 | 86 | 83 | 80 | 72 | 70 | 68 | 59 | 57 | 56 | 47 | 46 | 45 | 40 | 40 | 40 |
| 2   | 89  | 82  | 77  | 72  | 82 | 76 | 71 | 67 | 64 | 60 | 57 | 53 | 50 | 48 | 42 | 41 | 39 | 34 | 34 | 34 |
| 3   | 82  | 73  | 66  | 61  | 75 | 68 | 62 | 57 | 57 | 53 | 49 | 47 | 44 | 42 | 38 | 36 | 34 | 30 | 30 | 30 |
| 4   | 75  | 65  | 58  | 52  | 69 | 60 | 54 | 49 | 51 | 46 | 43 | 43 | 39 | 36 | 35 | 32 | 30 | 27 | 27 | 27 |
| 5   | 70  | 59  | 51  | 45  | 64 | 54 | 48 | 43 | 46 | 41 | 37 | 39 | 35 | 32 | 32 | 29 | 27 | 24 | 24 | 24 |
| 6   | 64  | 53  | 45  | 40  | 59 | 49 | 42 | 37 | 42 | 37 | 33 | 35 | 31 | 29 | 29 | 26 | 24 | 21 | 21 | 21 |
| 7   | 60  | 48  | 40  | 35  | 55 | 45 | 38 | 33 | 38 | 33 | 29 | 32 | 28 | 26 | 27 | 24 | 22 | 19 | 19 | 19 |
| 8   | 56  | 44  | 36  | 31  | 51 | 41 | 34 | 30 | 35 | 30 | 26 | 30 | 26 | 23 | 25 | 22 | 20 | 18 | 18 | 18 |
| 9   | 52  | 40  | 33  | 28  | 48 | 38 | 31 | 27 | 32 | 27 | 24 | 28 | 24 | 21 | 23 | 20 | 18 | 16 | 16 | 16 |
| 10  | 49  | 37  | 30  | 26  | 45 | 35 | 28 | 24 | 30 | 25 | 22 | 26 | 22 | 19 | 22 | 19 | 17 | 15 | 15 | 15 |

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

|     | 0°    | 90°   | 180°  | 270° |
|-----|-------|-------|-------|------|
| 0°  | 9984  | 9984  | 9984  | 9984 |
| 5°  | 10008 | 10604 | 10043 | 8472 |
| 10° | 9898  | 11209 | 9968  | 6996 |
| 15° | 9683  | 11212 | 9847  | 5256 |
| 20° | 9425  | 9268  | 9629  | 4336 |
| 25° | 9110  | 5791  | 9307  | 3688 |
| 30° | 8712  | 3709  | 8948  | 3175 |
| 35° | 8225  | 2850  | 8491  | 2718 |
| 40° | 7683  | 2395  | 8011  | 2377 |
| 45° | 7102  | 2038  | 7399  | 1996 |
| 50° | 6509  | 1733  | 6813  | 1726 |
| 55° | 5851  | 1506  | 6166  | 1486 |
| 60° | 5268  | 1148  | 5547  | 1134 |
| 65° | 4721  | 865   | 5002  | 980  |
| 70° | 4119  | 690   | 4443  | 798  |
| 75° | 3479  | 528   | 3798  | 605  |
| 80° | 2762  | 359   | 2978  | 395  |
| 85° | 1921  | 186   | 2105  | 195  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 165°

Vertical Angle: 45°

Luminance: 9134 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 59.8   | 2.5       |
| 10°-20°   | 167.0  | 7.0       |
| 20°-30°   | 214.9  | 9.0       |
| 30°-40°   | 203.9  | 8.5       |
| 40°-50°   | 174.7  | 7.3       |
| 50°-60°   | 133.1  | 5.6       |
| 60°-70°   | 83.9   | 3.5       |
| 70°-80°   | 41.9   | 1.7       |
| 80°-90°   | 11.5   | 0.5       |
| 90°-100°  | 14.7   | 0.6       |
| 100°-110° | 54.8   | 2.3       |
| 110°-120° | 145.3  | 6.1       |
| 120°-130° | 240.9  | 10.1      |
| 130°-140° | 255.9  | 10.7      |
| 140°-150° | 237.8  | 9.9       |
| 150°-160° | 191.2  | 8.0       |
| 160°-170° | 123.2  | 5.1       |
| 170°-180° | 42.4   | 1.8       |
| 0°-30°    | 441.7  | 18.4      |
| 0°-40°    | 645.6  | 26.9      |
| 0°-60°    | 953.4  | 39.8      |
| 0°-90°    | 1090.8 | 45.5      |
| 90°-120°  | 214.7  | 9.0       |
| 90°-150°  | 949.4  | 39.6      |
| 90°-180°  | 1306.0 | 54.5      |
| 0°-180°   | 2397.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 90° | 180° | 270° | 360° | Flux |
|------|-----|-----|------|------|------|------|
| 0°   | 631 | 631 | 631  | 631  | 631  |      |
| 5°   | 631 | 702 | 633  | 561  | 631  | 60   |
| 15°  | 595 | 792 | 605  | 371  | 595  | 167  |
| 25°  | 528 | 422 | 539  | 269  | 528  | 242  |
| 35°  | 433 | 208 | 447  | 199  | 433  | 271  |
| 45°  | 325 | 145 | 339  | 142  | 325  | 251  |
| 55°  | 220 | 100 | 231  | 99   | 220  | 198  |
| 65°  | 133 | 52  | 141  | 59   | 133  | 132  |
| 75°  | 62  | 28  | 68   | 32   | 62   | 67   |
| 85°  | 14  | 8   | 15   | 8    | 14   | 15   |
| 90°  | 0   | 9   | 0    | 9    | 0    | 2    |
| 95°  | 21  | 14  | 21   | 14   | 21   | 25   |
| 105° | 98  | 24  | 98   | 24   | 98   | 105  |
| 115° | 185 | 26  | 185  | 26   | 185  | 183  |
| 125° | 262 | 276 | 262  | 276  | 262  | 234  |
| 135° | 324 | 335 | 324  | 335  | 324  | 251  |
| 145° | 376 | 382 | 376  | 382  | 376  | 235  |
| 155° | 414 | 415 | 414  | 415  | 414  | 191  |
| 165° | 436 | 436 | 436  | 436  | 436  | 123  |
| 175° | 446 | 444 | 446  | 444  | 446  | 42   |
| 180° | 446 | 446 | 446  | 446  | 446  |      |

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 22.5° | 25°   | 30°   | 35°   | 40°   | 45°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 |
| 2.5°   | 634.7 | 637.3 | 638.6 | 640.4 | 644.3 | 647.0 | 650.9 | 651.8 | 651.3 | 653.1 | 648.3 |
| 5°     | 631.2 | 636.9 | 642.1 | 646.5 | 653.5 | 657.9 | 662.7 | 668.4 | 669.8 | 676.3 | 672.4 |
| 7.5°   | 626.4 | 634.7 | 642.1 | 650.9 | 661.4 | 667.1 | 674.6 | 683.3 | 687.3 | 695.2 | 697.4 |
| 10°    | 618.5 | 630.3 | 643.0 | 652.2 | 666.7 | 676.8 | 683.8 | 697.8 | 707.0 | 718.8 | 717.1 |
| 12.5°  | 605.8 | 621.1 | 638.2 | 653.5 | 672.4 | 679.0 | 692.1 | 706.6 | 718.4 | 729.4 | 739.0 |
| 15°    | 594.8 | 612.3 | 631.2 | 650.0 | 671.5 | 683.8 | 696.9 | 715.8 | 728.5 | 747.8 | 756.1 |
| 17.5°  | 579.9 | 602.3 | 624.6 | 645.6 | 671.1 | 685.1 | 701.3 | 719.7 | 738.6 | 757.0 | 763.6 |
| 20°    | 564.6 | 588.7 | 612.8 | 641.3 | 670.2 | 683.8 | 700.4 | 723.2 | 741.6 | 756.1 | 756.1 |
| 22.5°  | 546.1 | 575.5 | 603.1 | 630.3 | 661.9 | 681.6 | 698.7 | 725.4 | 738.6 | 741.6 | 729.8 |
| 25°    | 527.7 | 557.1 | 587.3 | 621.1 | 657.0 | 674.6 | 693.9 | 718.8 | 723.2 | 711.0 | 680.3 |
| 27.5°  | 505.8 | 538.7 | 572.9 | 609.3 | 647.0 | 668.9 | 686.4 | 703.1 | 694.7 | 661.9 | 614.1 |
| 30°    | 483.5 | 519.0 | 557.5 | 592.2 | 637.8 | 657.9 | 672.8 | 677.6 | 651.3 | 597.9 | 536.1 |
| 32.5°  | 460.2 | 494.9 | 535.6 | 577.3 | 623.3 | 642.6 | 652.2 | 639.5 | 591.3 | 523.8 | 448.4 |
| 35°    | 433.1 | 472.1 | 514.6 | 558.0 | 603.6 | 618.0 | 623.7 | 592.6 | 530.8 | 443.6 | 368.6 |
| 37.5°  | 408.5 | 447.5 | 493.1 | 537.4 | 581.6 | 589.5 | 583.8 | 535.2 | 456.7 | 370.4 | 297.2 |
| 40°    | 379.6 | 421.2 | 465.9 | 515.5 | 551.8 | 554.0 | 540.0 | 476.9 | 379.6 | 298.5 | 253.3 |
| 42.5°  | 352.8 | 394.9 | 439.6 | 490.0 | 517.7 | 510.2 | 491.4 | 408.5 | 316.9 | 257.3 | 220.9 |
| 45°    | 325.2 | 365.1 | 413.3 | 458.0 | 477.8 | 460.2 | 431.7 | 343.6 | 266.1 | 221.4 | 193.3 |
| 47.5°  | 298.5 | 335.8 | 383.5 | 426.5 | 430.0 | 410.3 | 376.5 | 288.0 | 230.6 | 194.6 | 171.8 |
| 50°    | 272.2 | 309.5 | 354.2 | 389.7 | 386.2 | 359.0 | 320.8 | 250.3 | 200.3 | 171.8 | 153.0 |
| 52.5°  | 245.9 | 279.6 | 323.0 | 351.1 | 336.2 | 309.9 | 272.2 | 212.1 | 174.9 | 149.9 | 135.4 |
| 55°    | 219.6 | 251.2 | 288.4 | 311.6 | 288.0 | 257.7 | 231.0 | 181.9 | 151.7 | 131.5 | 120.5 |
| 57.5°  | 197.7 | 222.7 | 256.9 | 270.9 | 242.4 | 218.7 | 195.5 | 156.5 | 131.5 | 117.0 | 104.3 |
| 60°    | 173.6 | 196.4 | 224.4 | 232.7 | 203.4 | 184.1 | 164.4 | 132.4 | 112.6 | 99.9  | 91.6  |
| 62.5°  | 153.0 | 171.8 | 193.3 | 193.3 | 167.4 | 153.0 | 138.1 | 110.9 | 94.7  | 84.6  | 80.7  |
| 65°    | 132.8 | 146.4 | 161.7 | 160.0 | 138.1 | 125.4 | 113.5 | 91.6  | 79.3  | 72.3  | 68.4  |
| 67.5°  | 113.1 | 123.6 | 133.7 | 127.6 | 111.8 | 100.8 | 89.9  | 74.1  | 65.7  | 60.9  | 55.7  |
| 70°    | 95.1  | 103.4 | 108.7 | 103.0 | 87.2  | 78.0  | 70.1  | 59.6  | 53.0  | 46.9  | 43.8  |
| 72.5°  | 79.8  | 83.3  | 85.0  | 78.0  | 64.9  | 59.6  | 53.9  | 46.5  | 40.8  | 37.7  | 36.8  |
| 75°    | 62.2  | 65.3  | 64.0  | 58.7  | 47.8  | 43.8  | 39.4  | 34.2  | 32.9  | 31.1  | 30.2  |
| 77.5°  | 48.7  | 48.7  | 46.5  | 41.6  | 34.2  | 31.1  | 29.4  | 26.7  | 25.4  | 25.0  | 24.1  |
| 80°    | 34.6  | 34.2  | 32.9  | 27.6  | 23.2  | 21.5  | 21.5  | 19.7  | 19.3  | 18.4  | 18.4  |
| 82.5°  | 22.8  | 22.8  | 21.0  | 16.7  | 15.3  | 14.9  | 14.5  | 13.6  | 13.6  | 13.1  | 13.1  |
| 85°    | 13.6  | 12.7  | 10.5  | 9.2   | 8.8   | 8.8   | 8.3   | 7.9   | 8.3   | 7.9   | 7.9   |
| 87.5°  | 6.1   | 4.8   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   |
| 90°    | 0.3   | 1.1   | 1.9   | 2.7   | 3.5   | 3.9   | 4.2   | 4.7   | 5.3   | 5.8   | 6.4   |
| 92.5°  | 8.1   | 7.8   | 7.5   | 7.2   | 6.9   | 6.8   | 6.9   | 7.1   | 7.3   | 7.5   | 7.7   |
| 95°    | 21.0  | 18.6  | 16.2  | 13.9  | 11.5  | 10.3  | 10.6  | 11.1  | 11.6  | 12.1  | 12.6  |
| 97.5°  | 37.7  | 31.8  | 26.0  | 20.1  | 14.2  | 11.3  | 11.9  | 13.0  | 14.1  | 15.3  | 16.4  |
| 100°   | 57.1  | 47.3  | 37.5  | 27.6  | 17.8  | 12.9  | 13.5  | 14.7  | 16.0  | 17.2  | 18.4  |
| 102.5° | 78.3  | 78.2  | 78.0  | 77.9  | 77.8  | 77.7  | 71.2  | 58.1  | 45.1  | 32.0  | 19.0  |
| 105°   | 98.0  | 100.2 | 102.3 | 104.5 | 106.6 | 107.7 | 97.9  | 78.4  | 58.8  | 39.3  | 19.7  |
| 107.5° | 120.9 | 122.7 | 124.5 | 126.3 | 128.1 | 129.0 | 116.9 | 92.8  | 68.6  | 44.5  | 20.3  |
| 110°   | 142.8 | 144.3 | 145.8 | 147.3 | 148.8 | 149.6 | 139.2 | 118.5 | 97.8  | 77.1  | 56.4  |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 22.5° | 25°   | 30°   | 35°   | 40°   | 45°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 163.5 | 164.8 | 166.1 | 167.4 | 168.7 | 169.3 | 168.7 | 167.5 | 166.2 | 165.0 | 163.8 |
| 115°   | 185.4 | 186.6 | 187.8 | 189.1 | 190.3 | 190.9 | 191.8 | 193.6 | 195.3 | 197.1 | 198.9 |
| 117.5° | 204.4 | 205.8 | 207.2 | 208.7 | 210.1 | 210.8 | 211.4 | 212.6 | 213.9 | 215.1 | 216.3 |
| 120°   | 225.7 | 226.8 | 227.8 | 228.9 | 230.0 | 230.5 | 231.1 | 232.4 | 233.7 | 235.0 | 236.3 |
| 122.5° | 243.7 | 244.9 | 246.0 | 247.2 | 248.3 | 248.9 | 249.6 | 251.0 | 252.5 | 253.9 | 255.3 |
| 125°   | 262.1 | 263.0 | 264.0 | 264.9 | 265.8 | 266.3 | 267.0 | 268.3 | 269.7 | 271.0 | 272.4 |
| 127.5° | 278.9 | 279.9 | 280.9 | 281.9 | 282.9 | 283.4 | 283.9 | 285.0 | 286.1 | 287.1 | 288.2 |
| 130°   | 294.7 | 295.8 | 297.0 | 298.1 | 299.2 | 299.8 | 300.2 | 301.0 | 301.8 | 302.6 | 303.4 |
| 132.5° | 310.8 | 311.7 | 312.7 | 313.6 | 314.5 | 315.0 | 315.4 | 316.2 | 316.9 | 317.7 | 318.5 |
| 135°   | 324.3 | 325.5 | 326.6 | 327.8 | 328.9 | 329.5 | 329.8 | 330.5 | 331.1 | 331.8 | 332.4 |
| 137.5° | 338.5 | 339.4 | 340.2 | 341.1 | 342.0 | 342.4 | 342.8 | 343.5 | 344.2 | 344.9 | 345.6 |
| 140°   | 352.4 | 353.0 | 353.6 | 354.1 | 354.7 | 355.0 | 355.4 | 356.2 | 356.9 | 357.7 | 358.5 |
| 142.5° | 364.0 | 364.5 | 365.0 | 365.5 | 366.0 | 366.2 | 366.7 | 367.6 | 368.5 | 369.5 | 370.4 |
| 145°   | 376.2 | 376.1 | 376.1 | 376.0 | 375.9 | 375.9 | 376.5 | 377.7 | 379.0 | 380.2 | 381.4 |
| 147.5° | 386.9 | 386.7 | 386.5 | 386.2 | 386.0 | 385.9 | 386.5 | 387.7 | 389.0 | 390.2 | 391.4 |
| 150°   | 397.2 | 396.7 | 396.2 | 395.7 | 395.2 | 394.9 | 395.5 | 396.6 | 397.8 | 398.9 | 400.1 |
| 152.5° | 405.9 | 405.3 | 404.7 | 404.2 | 403.6 | 403.3 | 403.8 | 404.9 | 406.0 | 407.1 | 408.2 |
| 155°   | 414.3 | 413.7 | 413.0 | 412.4 | 411.7 | 411.4 | 411.8 | 412.7 | 413.6 | 414.4 | 415.3 |
| 157.5° | 421.1 | 420.5 | 419.9 | 419.4 | 418.8 | 418.5 | 418.8 | 419.5 | 420.1 | 420.8 | 421.4 |
| 160°   | 426.9 | 426.5 | 426.0 | 425.6 | 425.1 | 424.9 | 425.1 | 425.6 | 426.0 | 426.5 | 426.9 |
| 162.5° | 432.0 | 431.6 | 431.2 | 430.7 | 430.3 | 430.1 | 430.3 | 430.6 | 431.0 | 431.3 | 431.7 |
| 165°   | 436.5 | 436.1 | 435.7 | 435.2 | 434.8 | 434.6 | 434.7 | 434.9 | 435.2 | 435.4 | 435.6 |
| 167.5° | 440.1 | 439.7 | 439.2 | 438.8 | 438.3 | 438.1 | 438.2 | 438.4 | 438.7 | 438.9 | 439.1 |
| 170°   | 443.0 | 442.6 | 442.1 | 441.7 | 441.2 | 441.0 | 441.1 | 441.2 | 441.4 | 441.5 | 441.7 |
| 172.5° | 444.9 | 444.5 | 444.1 | 443.6 | 443.2 | 443.0 | 443.1 | 443.2 | 443.3 | 443.5 | 443.6 |
| 175°   | 446.5 | 446.0 | 445.5 | 445.0 | 444.5 | 444.3 | 444.4 | 444.5 | 444.6 | 444.8 | 444.9 |
| 177.5° | 447.2 | 446.7 | 446.2 | 445.7 | 445.2 | 444.9 | 444.9 | 445.0 | 445.1 | 445.1 | 445.2 |
| 180°   | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 |

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**CANDELA DISTRIBUTION (continued):**

|        | 50°   | 55°   | 60°   | 65°   | 67.5° | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 |
| 2.5°   | 653.1 | 654.0 | 655.3 | 661.4 | 662.3 | 664.1 | 663.2 | 663.2 | 663.6 | 662.7 | 663.2 |
| 5°     | 681.1 | 682.5 | 689.0 | 696.5 | 698.2 | 696.5 | 698.7 | 701.7 | 701.7 | 701.7 | 700.9 |
| 7.5°   | 707.4 | 712.3 | 719.7 | 730.7 | 732.9 | 735.1 | 739.0 | 736.4 | 737.3 | 741.2 | 739.9 |
| 10°    | 732.9 | 739.9 | 748.2 | 757.4 | 762.2 | 765.3 | 767.1 | 771.0 | 780.2 | 769.7 | 773.6 |
| 12.5°  | 757.0 | 767.1 | 775.8 | 785.9 | 789.4 | 793.4 | 794.7 | 798.2 | 798.2 | 797.7 | 800.8 |
| 15°    | 772.8 | 782.0 | 789.9 | 796.4 | 797.3 | 796.4 | 795.5 | 796.0 | 797.3 | 792.0 | 795.1 |
| 17.5°  | 776.3 | 777.1 | 779.8 | 777.1 | 777.6 | 768.4 | 763.1 | 761.8 | 749.5 | 750.0 | 760.0 |
| 20°    | 759.2 | 744.3 | 740.3 | 725.9 | 717.1 | 693.4 | 692.5 | 686.0 | 660.1 | 668.0 | 666.2 |
| 22.5°  | 712.3 | 686.8 | 653.1 | 636.4 | 628.1 | 603.1 | 583.8 | 570.3 | 561.0 | 551.8 | 547.9 |
| 25°    | 650.5 | 609.3 | 561.5 | 528.6 | 523.8 | 500.6 | 465.1 | 448.4 | 428.7 | 422.5 | 433.1 |
| 27.5°  | 570.7 | 517.2 | 463.3 | 412.9 | 403.7 | 382.7 | 364.7 | 352.8 | 330.1 | 328.7 | 329.6 |
| 30°    | 462.4 | 408.5 | 363.4 | 330.5 | 307.7 | 298.1 | 286.2 | 277.5 | 268.3 | 271.8 | 272.6 |
| 32.5°  | 380.0 | 328.7 | 286.7 | 269.1 | 258.6 | 252.5 | 242.4 | 236.7 | 232.7 | 231.4 | 231.0 |
| 35°    | 302.0 | 267.8 | 249.0 | 231.9 | 225.7 | 221.4 | 213.9 | 211.3 | 207.8 | 208.2 | 208.2 |
| 37.5°  | 258.6 | 230.1 | 216.1 | 207.3 | 201.6 | 199.4 | 194.6 | 192.0 | 189.8 | 188.9 | 190.2 |
| 40°    | 223.1 | 203.4 | 194.6 | 186.7 | 181.9 | 181.0 | 178.4 | 175.3 | 172.7 | 173.1 | 174.5 |
| 42.5°  | 197.2 | 185.8 | 175.3 | 169.2 | 165.7 | 164.4 | 162.2 | 160.0 | 160.0 | 158.7 | 158.2 |
| 45°    | 176.6 | 167.4 | 158.7 | 153.0 | 150.8 | 149.0 | 146.4 | 146.0 | 144.2 | 144.6 | 145.1 |
| 47.5°  | 158.2 | 150.8 | 144.2 | 138.5 | 136.3 | 135.9 | 133.2 | 131.5 | 131.5 | 131.1 | 130.6 |
| 50°    | 141.6 | 134.1 | 128.4 | 125.4 | 122.3 | 121.4 | 121.0 | 120.5 | 119.7 | 119.7 | 120.1 |
| 52.5°  | 128.0 | 120.5 | 116.2 | 113.5 | 111.8 | 110.9 | 110.9 | 110.5 | 110.5 | 110.5 | 110.0 |
| 55°    | 113.1 | 106.9 | 103.4 | 102.6 | 101.7 | 101.3 | 100.8 | 99.9  | 99.5  | 100.4 | 99.5  |
| 57.5°  | 99.1  | 96.9  | 93.8  | 92.9  | 90.7  | 90.7  | 89.4  | 88.5  | 87.7  | 88.5  | 88.5  |
| 60°    | 88.1  | 85.0  | 83.3  | 80.7  | 78.9  | 77.1  | 75.0  | 74.5  | 73.6  | 73.2  | 72.8  |
| 62.5°  | 76.7  | 74.1  | 69.7  | 65.7  | 63.1  | 61.4  | 60.5  | 60.0  | 60.0  | 59.6  | 59.6  |
| 65°    | 64.0  | 57.9  | 55.7  | 54.4  | 53.9  | 53.5  | 52.6  | 52.2  | 52.6  | 52.2  | 52.6  |
| 67.5°  | 50.0  | 49.1  | 47.8  | 46.9  | 46.5  | 46.0  | 46.0  | 45.6  | 45.6  | 45.6  | 45.6  |
| 70°    | 43.4  | 41.2  | 40.8  | 39.9  | 39.9  | 39.4  | 39.4  | 39.4  | 39.4  | 39.0  | 39.9  |
| 72.5°  | 35.9  | 34.6  | 34.2  | 33.8  | 33.8  | 33.8  | 33.3  | 33.3  | 33.3  | 32.9  | 33.3  |
| 75°    | 29.4  | 28.9  | 28.1  | 28.1  | 27.6  | 28.1  | 27.6  | 27.6  | 27.2  | 27.6  | 27.6  |
| 77.5°  | 23.7  | 23.2  | 22.8  | 22.8  | 22.4  | 22.4  | 22.4  | 22.4  | 22.4  | 22.4  | 22.8  |
| 80°    | 18.0  | 17.5  | 17.1  | 17.5  | 17.1  | 17.5  | 17.1  | 17.1  | 17.5  | 17.1  | 17.1  |
| 82.5°  | 13.1  | 12.7  | 12.7  | 12.3  | 12.3  | 12.3  | 12.3  | 12.3  | 12.3  | 12.3  | 12.3  |
| 85°    | 7.9   | 7.5   | 7.5   | 7.9   | 7.5   | 7.9   | 7.5   | 7.5   | 7.5   | 7.9   | 7.9   |
| 87.5°  | 3.5   | 3.9   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 3.9   |
| 90°    | 6.8   | 7.2   | 7.5   | 7.9   | 8.1   | 8.2   | 8.3   | 8.4   | 8.6   | 8.7   | 8.6   |
| 92.5°  | 7.9   | 8.0   | 8.2   | 8.3   | 8.4   | 8.4   | 8.5   | 8.6   | 8.6   | 8.7   | 8.6   |
| 95°    | 13.0  | 13.3  | 13.7  | 14.0  | 14.2  | 14.2  | 14.1  | 14.0  | 14.0  | 13.9  | 14.0  |
| 97.5°  | 16.6  | 16.8  | 17.1  | 17.3  | 17.4  | 17.4  | 17.5  | 17.6  | 17.6  | 17.7  | 17.6  |
| 100°   | 19.0  | 19.6  | 20.1  | 20.7  | 21.0  | 21.1  | 21.2  | 21.3  | 21.5  | 21.6  | 21.5  |
| 102.5° | 19.8  | 20.6  | 21.4  | 22.2  | 22.6  | 22.7  | 22.9  | 23.1  | 23.3  | 23.5  | 23.3  |
| 105°   | 20.5  | 21.3  | 22.0  | 22.8  | 23.2  | 23.3  | 23.6  | 23.9  | 24.2  | 24.5  | 24.2  |
| 107.5° | 21.1  | 21.9  | 22.7  | 23.5  | 23.9  | 24.0  | 24.3  | 24.6  | 24.8  | 25.1  | 24.8  |
| 110°   | 49.2  | 42.1  | 34.9  | 27.8  | 24.2  | 24.3  | 24.6  | 24.9  | 25.2  | 25.5  | 25.2  |

TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 50°   | 55°   | 60°   | 65°   | 67.5° | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 132.9 | 102.0 | 71.1  | 40.2  | 24.8  | 24.9  | 25.1  | 25.4  | 25.6  | 25.8  | 25.6  |
| 115°   | 165.7 | 132.5 | 99.4  | 66.2  | 49.6  | 47.0  | 41.9  | 36.7  | 31.6  | 26.4  | 31.6  |
| 117.5° | 206.1 | 195.8 | 185.6 | 175.3 | 170.2 | 160.8 | 142.1 | 123.3 | 104.6 | 85.8  | 104.6 |
| 120°   | 237.2 | 238.0 | 238.9 | 239.8 | 240.2 | 235.4 | 225.7 | 216.0 | 206.4 | 196.7 | 206.4 |
| 122.5° | 255.7 | 256.2 | 256.6 | 257.1 | 257.3 | 257.3 | 257.4 | 257.5 | 257.5 | 257.6 | 257.5 |
| 125°   | 272.9 | 273.4 | 273.9 | 274.4 | 274.7 | 274.8 | 275.0 | 275.3 | 275.5 | 275.7 | 275.5 |
| 127.5° | 288.9 | 289.6 | 290.3 | 291.0 | 291.4 | 291.4 | 291.5 | 291.6 | 291.7 | 291.8 | 291.7 |
| 130°   | 304.2 | 305.0 | 305.7 | 306.5 | 306.9 | 306.9 | 306.8 | 306.7 | 306.7 | 306.6 | 306.7 |
| 132.5° | 319.1 | 319.8 | 320.4 | 321.1 | 321.4 | 321.4 | 321.3 | 321.2 | 321.2 | 321.1 | 321.2 |
| 135°   | 333.1 | 333.8 | 334.5 | 335.2 | 335.6 | 335.5 | 335.4 | 335.3 | 335.1 | 335.0 | 335.1 |
| 137.5° | 346.3 | 347.0 | 347.7 | 348.4 | 348.8 | 348.7 | 348.5 | 348.3 | 348.1 | 347.9 | 348.1 |
| 140°   | 359.1 | 359.8 | 360.4 | 361.1 | 361.4 | 361.2 | 360.9 | 360.5 | 360.2 | 359.8 | 360.2 |
| 142.5° | 371.0 | 371.6 | 372.1 | 372.7 | 373.0 | 372.8 | 372.5 | 372.1 | 371.8 | 371.4 | 371.8 |
| 145°   | 381.9 | 382.4 | 382.9 | 383.4 | 383.7 | 383.5 | 383.1 | 382.8 | 382.4 | 382.0 | 382.4 |
| 147.5° | 391.8 | 392.1 | 392.5 | 392.8 | 393.0 | 392.9 | 392.6 | 392.3 | 392.0 | 391.7 | 392.0 |
| 150°   | 400.5 | 400.9 | 401.4 | 401.8 | 402.0 | 401.8 | 401.5 | 401.1 | 400.8 | 400.4 | 400.8 |
| 152.5° | 408.6 | 409.0 | 409.5 | 409.9 | 410.1 | 409.8 | 409.3 | 408.8 | 408.3 | 407.8 | 408.3 |
| 155°   | 415.7 | 416.1 | 416.6 | 417.0 | 417.2 | 416.9 | 416.3 | 415.8 | 415.2 | 414.6 | 415.2 |
| 157.5° | 421.9 | 422.4 | 422.9 | 423.4 | 423.6 | 423.3 | 422.8 | 422.2 | 421.7 | 421.1 | 421.7 |
| 160°   | 427.3 | 427.7 | 428.2 | 428.6 | 428.8 | 428.5 | 428.0 | 427.5 | 427.0 | 426.5 | 427.0 |
| 162.5° | 432.2 | 432.7 | 433.2 | 433.7 | 434.0 | 433.7 | 433.0 | 432.3 | 431.7 | 431.0 | 431.7 |
| 165°   | 436.1 | 436.6 | 437.1 | 437.6 | 437.8 | 437.6 | 437.1 | 436.6 | 436.1 | 435.6 | 436.1 |
| 167.5° | 439.6 | 440.1 | 440.6 | 441.1 | 441.4 | 441.1 | 440.4 | 439.8 | 439.1 | 438.5 | 439.1 |
| 170°   | 442.2 | 442.7 | 443.2 | 443.7 | 443.9 | 443.6 | 442.9 | 442.3 | 441.6 | 441.0 | 441.6 |
| 172.5° | 444.1 | 444.6 | 445.1 | 445.6 | 445.9 | 445.6 | 444.9 | 444.3 | 443.6 | 443.0 | 443.6 |
| 175°   | 445.4 | 445.9 | 446.4 | 446.9 | 447.2 | 446.8 | 446.1 | 445.4 | 444.6 | 443.9 | 444.6 |
| 177.5° | 445.7 | 446.2 | 446.7 | 447.2 | 447.5 | 447.2 | 446.5 | 445.9 | 445.2 | 444.6 | 445.2 |
| 180°   | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 |

TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 100°  | 105°  | 110°  | 112.5° | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  |
|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 630.7 | 630.7 | 630.7 | 630.7  | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 |
| 2.5°   | 664.9 | 661.9 | 661.0 | 661.9  | 661.0 | 661.4 | 658.4 | 647.0 | 650.0 | 645.2 | 647.8 |
| 5°     | 702.6 | 700.0 | 694.3 | 693.4  | 692.5 | 691.7 | 687.3 | 677.2 | 673.3 | 666.7 | 666.2 |
| 7.5°   | 738.6 | 738.6 | 734.2 | 731.1  | 727.2 | 724.1 | 718.4 | 703.5 | 697.4 | 689.5 | 685.1 |
| 10°    | 774.1 | 762.7 | 767.5 | 764.4  | 754.8 | 753.0 | 742.5 | 733.7 | 721.9 | 714.0 | 707.0 |
| 12.5°  | 799.5 | 796.0 | 791.6 | 789.0  | 786.3 | 780.6 | 773.6 | 751.3 | 745.1 | 729.4 | 721.5 |
| 15°    | 798.6 | 796.4 | 797.7 | 797.7  | 796.9 | 795.5 | 789.9 | 773.6 | 763.1 | 747.8 | 734.2 |
| 17.5°  | 755.7 | 761.4 | 767.1 | 771.0  | 779.8 | 783.7 | 789.0 | 779.3 | 772.8 | 759.6 | 745.1 |
| 20°    | 680.7 | 694.7 | 711.4 | 714.9  | 722.8 | 746.0 | 756.5 | 764.9 | 767.5 | 763.1 | 751.3 |
| 22.5°  | 576.4 | 588.2 | 628.6 | 627.7  | 639.1 | 666.7 | 697.4 | 722.4 | 742.1 | 753.0 | 748.6 |
| 25°    | 451.5 | 468.1 | 489.6 | 505.8  | 543.1 | 584.3 | 622.4 | 662.3 | 696.5 | 726.7 | 734.2 |
| 27.5°  | 341.5 | 363.4 | 380.5 | 401.9  | 420.8 | 469.4 | 518.5 | 580.8 | 620.7 | 678.1 | 707.9 |
| 30°    | 276.1 | 286.2 | 303.3 | 313.4  | 322.6 | 359.9 | 415.5 | 476.9 | 547.0 | 613.2 | 664.5 |
| 32.5°  | 235.8 | 242.8 | 255.5 | 259.9  | 269.6 | 294.6 | 329.6 | 385.7 | 458.0 | 538.3 | 605.8 |
| 35°    | 211.7 | 219.2 | 221.8 | 225.7  | 233.6 | 249.4 | 273.5 | 314.3 | 379.6 | 458.0 | 538.7 |
| 37.5°  | 191.1 | 195.1 | 202.5 | 205.1  | 207.8 | 219.6 | 235.8 | 264.3 | 307.7 | 372.1 | 461.6 |
| 40°    | 176.6 | 178.8 | 182.8 | 185.0  | 186.7 | 195.1 | 209.5 | 228.8 | 260.8 | 309.9 | 392.3 |
| 42.5°  | 161.3 | 163.9 | 166.6 | 169.2  | 171.4 | 178.0 | 186.7 | 205.1 | 226.6 | 263.9 | 323.5 |
| 45°    | 146.4 | 148.2 | 151.2 | 153.0  | 156.0 | 161.3 | 169.2 | 181.9 | 201.2 | 224.9 | 273.1 |
| 47.5°  | 132.8 | 135.0 | 136.3 | 138.5  | 140.7 | 146.4 | 153.9 | 162.2 | 178.0 | 201.2 | 236.3 |
| 50°    | 120.5 | 123.2 | 124.9 | 125.4  | 127.1 | 132.4 | 138.5 | 147.7 | 157.8 | 175.8 | 206.4 |
| 52.5°  | 111.8 | 112.2 | 113.5 | 115.3  | 114.8 | 117.9 | 123.6 | 130.6 | 141.1 | 155.6 | 178.0 |
| 55°    | 101.7 | 103.0 | 103.9 | 104.3  | 104.3 | 106.9 | 110.0 | 116.6 | 124.9 | 136.8 | 155.6 |
| 57.5°  | 89.0  | 90.3  | 92.9  | 93.8   | 95.1  | 96.4  | 97.7  | 102.1 | 109.1 | 120.5 | 135.9 |
| 60°    | 75.8  | 76.7  | 79.3  | 81.1   | 82.0  | 85.5  | 87.2  | 90.7  | 94.7  | 103.0 | 117.5 |
| 62.5°  | 60.9  | 61.8  | 63.1  | 64.9   | 66.6  | 71.9  | 76.3  | 79.8  | 82.8  | 88.5  | 100.4 |
| 65°    | 53.0  | 53.5  | 54.4  | 54.8   | 55.2  | 57.4  | 61.4  | 66.2  | 71.9  | 76.3  | 83.3  |
| 67.5°  | 46.0  | 46.5  | 46.9  | 47.8   | 48.2  | 48.7  | 50.4  | 51.7  | 57.4  | 63.6  | 68.8  |
| 70°    | 39.4  | 40.3  | 40.8  | 40.8   | 41.2  | 42.1  | 43.0  | 44.7  | 46.5  | 49.5  | 56.1  |
| 72.5°  | 33.3  | 33.8  | 34.6  | 34.6   | 34.6  | 35.5  | 36.4  | 37.3  | 38.1  | 39.9  | 42.5  |
| 75°    | 27.6  | 28.5  | 28.5  | 28.5   | 28.9  | 28.9  | 29.8  | 30.7  | 31.6  | 32.9  | 33.8  |
| 77.5°  | 22.8  | 22.8  | 22.8  | 22.8   | 23.2  | 23.2  | 23.7  | 24.5  | 25.0  | 25.4  | 26.3  |
| 80°    | 17.1  | 17.5  | 17.5  | 17.5   | 18.0  | 18.0  | 18.0  | 18.8  | 19.3  | 19.3  | 20.2  |
| 82.5°  | 12.7  | 12.7  | 12.7  | 13.1   | 12.7  | 13.1  | 13.1  | 13.6  | 13.1  | 13.6  | 14.0  |
| 85°    | 7.9   | 7.9   | 7.9   | 8.3    | 8.3   | 8.3   | 8.3   | 8.3   | 8.3   | 8.3   | 8.8   |
| 87.5°  | 3.9   | 3.9   | 3.9   | 3.9    | 3.9   | 3.9   | 3.9   | 3.9   | 4.4   | 3.9   | 3.9   |
| 90°    | 8.4   | 8.3   | 8.2   | 8.1    | 7.9   | 7.5   | 7.2   | 6.8   | 6.4   | 5.8   | 5.3   |
| 92.5°  | 8.6   | 8.5   | 8.4   | 8.4    | 8.3   | 8.2   | 8.0   | 7.9   | 7.7   | 7.5   | 7.3   |
| 95°    | 14.0  | 14.1  | 14.2  | 14.2   | 14.0  | 13.7  | 13.3  | 13.0  | 12.6  | 12.1  | 11.6  |
| 97.5°  | 17.6  | 17.5  | 17.4  | 17.4   | 17.3  | 17.1  | 16.8  | 16.6  | 16.4  | 15.3  | 14.1  |
| 100°   | 21.3  | 21.2  | 21.1  | 21.0   | 20.7  | 20.1  | 19.6  | 19.0  | 18.4  | 17.2  | 16.0  |
| 102.5° | 23.1  | 22.9  | 22.7  | 22.6   | 22.2  | 21.4  | 20.6  | 19.8  | 19.0  | 32.0  | 45.1  |
| 105°   | 23.9  | 23.6  | 23.3  | 23.2   | 22.8  | 22.0  | 21.3  | 20.5  | 19.7  | 39.3  | 58.8  |
| 107.5° | 24.6  | 24.3  | 24.0  | 23.9   | 23.5  | 22.7  | 21.9  | 21.1  | 20.3  | 44.5  | 68.6  |
| 110°   | 24.9  | 24.6  | 24.3  | 24.2   | 27.8  | 34.9  | 42.1  | 49.2  | 56.4  | 77.1  | 97.8  |

TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 100°  | 105°  | 110°  | 112.5° | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  |
|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 25.4  | 25.1  | 24.9  | 24.8   | 40.2  | 71.1  | 102.0 | 132.9 | 163.8 | 165.0 | 166.2 |
| 115°   | 36.7  | 41.9  | 47.0  | 49.6   | 66.2  | 99.4  | 132.5 | 165.7 | 198.9 | 197.1 | 195.3 |
| 117.5° | 123.3 | 142.1 | 160.8 | 170.2  | 175.3 | 185.6 | 195.8 | 206.1 | 216.3 | 215.1 | 213.9 |
| 120°   | 216.0 | 225.7 | 235.4 | 240.2  | 239.8 | 238.9 | 238.0 | 237.2 | 236.3 | 235.0 | 233.7 |
| 122.5° | 257.5 | 257.4 | 257.3 | 257.3  | 257.1 | 256.6 | 256.2 | 255.7 | 255.3 | 253.9 | 252.5 |
| 125°   | 275.3 | 275.0 | 274.8 | 274.7  | 274.4 | 273.9 | 273.4 | 272.9 | 272.4 | 271.0 | 269.7 |
| 127.5° | 291.6 | 291.5 | 291.4 | 291.4  | 291.0 | 290.3 | 289.6 | 288.9 | 288.2 | 287.1 | 286.1 |
| 130°   | 306.7 | 306.8 | 306.9 | 306.9  | 306.5 | 305.7 | 305.0 | 304.2 | 303.4 | 302.6 | 301.8 |
| 132.5° | 321.2 | 321.3 | 321.4 | 321.4  | 321.1 | 320.4 | 319.8 | 319.1 | 318.5 | 317.7 | 316.9 |
| 135°   | 335.3 | 335.4 | 335.5 | 335.6  | 335.2 | 334.5 | 333.8 | 333.1 | 332.4 | 331.8 | 331.1 |
| 137.5° | 348.3 | 348.5 | 348.7 | 348.8  | 348.4 | 347.7 | 347.0 | 346.3 | 345.6 | 344.9 | 344.2 |
| 140°   | 360.5 | 360.9 | 361.2 | 361.4  | 361.1 | 360.4 | 359.8 | 359.1 | 358.5 | 357.7 | 356.9 |
| 142.5° | 372.1 | 372.5 | 372.8 | 373.0  | 372.7 | 372.1 | 371.6 | 371.0 | 370.4 | 369.5 | 368.5 |
| 145°   | 382.8 | 383.1 | 383.5 | 383.7  | 383.4 | 382.9 | 382.4 | 381.9 | 381.4 | 380.2 | 379.0 |
| 147.5° | 392.3 | 392.6 | 392.9 | 393.0  | 392.8 | 392.5 | 392.1 | 391.8 | 391.4 | 390.2 | 389.0 |
| 150°   | 401.1 | 401.5 | 401.8 | 402.0  | 401.8 | 401.4 | 400.9 | 400.5 | 400.1 | 398.9 | 397.8 |
| 152.5° | 408.8 | 409.3 | 409.8 | 410.1  | 409.9 | 409.5 | 409.0 | 408.6 | 408.2 | 407.1 | 406.0 |
| 155°   | 415.8 | 416.3 | 416.9 | 417.2  | 417.0 | 416.6 | 416.1 | 415.7 | 415.3 | 414.4 | 413.6 |
| 157.5° | 422.2 | 422.8 | 423.3 | 423.6  | 423.4 | 422.9 | 422.4 | 421.9 | 421.4 | 420.8 | 420.1 |
| 160°   | 427.5 | 428.0 | 428.5 | 428.8  | 428.6 | 428.2 | 427.7 | 427.3 | 426.9 | 426.5 | 426.0 |
| 162.5° | 432.3 | 433.0 | 433.7 | 434.0  | 433.7 | 433.2 | 432.7 | 432.2 | 431.7 | 431.3 | 431.0 |
| 165°   | 436.6 | 437.1 | 437.6 | 437.8  | 437.6 | 437.1 | 436.6 | 436.1 | 435.6 | 435.4 | 435.2 |
| 167.5° | 439.8 | 440.4 | 441.1 | 441.4  | 441.1 | 440.6 | 440.1 | 439.6 | 439.1 | 438.9 | 438.7 |
| 170°   | 442.3 | 442.9 | 443.6 | 443.9  | 443.7 | 443.2 | 442.7 | 442.2 | 441.7 | 441.5 | 441.4 |
| 172.5° | 444.3 | 444.9 | 445.6 | 445.9  | 445.6 | 445.1 | 444.6 | 444.1 | 443.6 | 443.5 | 443.3 |
| 175°   | 445.4 | 446.1 | 446.8 | 447.2  | 446.9 | 446.4 | 445.9 | 445.4 | 444.9 | 444.8 | 444.6 |
| 177.5° | 445.9 | 446.5 | 447.2 | 447.5  | 447.2 | 446.7 | 446.2 | 445.7 | 445.2 | 445.1 | 445.1 |
| 180°   | 445.6 | 445.6 | 445.6 | 445.6  | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 |

TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 150°  | 155°  | 157.5° | 160°  | 165°  | 170°  | 175°  | 180°  | 185°  | 190°  | 195°  |
|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 630.7 | 630.7 | 630.7  | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 |
| 2.5°   | 643.9 | 641.7 | 641.7  | 640.4 | 640.4 | 633.4 | 633.4 | 635.6 | 632.9 | 629.9 | 625.5 |
| 5°     | 660.5 | 655.7 | 654.4  | 652.7 | 647.0 | 638.2 | 634.7 | 633.4 | 628.1 | 621.5 | 614.1 |
| 7.5°   | 676.3 | 668.4 | 664.5  | 660.5 | 653.1 | 640.8 | 633.8 | 629.0 | 621.1 | 611.0 | 601.4 |
| 10°    | 691.7 | 681.6 | 671.5  | 666.7 | 656.2 | 640.8 | 630.7 | 622.9 | 611.5 | 597.9 | 584.3 |
| 12.5°  | 705.7 | 684.7 | 682.9  | 673.3 | 657.9 | 640.4 | 625.0 | 613.6 | 599.2 | 583.4 | 567.6 |
| 15°    | 718.0 | 696.5 | 686.0  | 677.2 | 657.0 | 635.1 | 618.9 | 604.9 | 585.6 | 567.6 | 548.3 |
| 17.5°  | 724.1 | 700.9 | 693.9  | 679.4 | 658.8 | 630.3 | 608.4 | 591.3 | 570.3 | 548.8 | 526.9 |
| 20°    | 730.2 | 703.1 | 691.7  | 681.6 | 653.5 | 621.1 | 596.6 | 576.8 | 553.6 | 528.2 | 504.1 |
| 22.5°  | 733.3 | 703.1 | 689.5  | 675.5 | 648.3 | 611.0 | 582.1 | 558.9 | 531.7 | 505.8 | 476.9 |
| 25°    | 728.0 | 700.4 | 684.2  | 669.8 | 639.1 | 598.7 | 565.4 | 539.1 | 510.2 | 480.8 | 451.5 |
| 27.5°  | 714.9 | 694.3 | 675.5  | 660.5 | 626.4 | 583.0 | 547.9 | 518.1 | 488.3 | 455.4 | 425.6 |
| 30°    | 690.4 | 681.1 | 666.2  | 649.6 | 612.3 | 568.9 | 527.3 | 496.6 | 463.7 | 430.9 | 399.7 |
| 32.5°  | 652.2 | 660.1 | 650.5  | 636.0 | 595.7 | 549.7 | 505.4 | 474.3 | 438.3 | 402.8 | 374.3 |
| 35°    | 605.8 | 633.8 | 628.6  | 618.5 | 578.1 | 529.1 | 484.8 | 447.1 | 411.1 | 375.2 | 346.7 |
| 37.5°  | 554.9 | 597.4 | 601.8  | 595.7 | 558.0 | 508.0 | 459.4 | 422.5 | 385.7 | 349.3 | 320.4 |
| 40°    | 485.2 | 550.5 | 564.6  | 567.2 | 536.9 | 482.6 | 431.7 | 395.8 | 359.4 | 323.9 | 288.9 |
| 42.5°  | 421.2 | 503.6 | 521.2  | 532.1 | 510.2 | 457.6 | 406.3 | 366.4 | 330.5 | 298.5 | 263.4 |
| 45°    | 361.2 | 447.1 | 475.6  | 489.6 | 480.0 | 429.1 | 376.1 | 338.8 | 305.9 | 276.6 | 242.8 |
| 47.5°  | 299.4 | 385.7 | 425.6  | 448.0 | 448.0 | 400.2 | 347.1 | 310.3 | 278.8 | 253.8 | 224.0 |
| 50°    | 258.2 | 330.1 | 371.3  | 400.6 | 408.5 | 370.8 | 320.8 | 284.9 | 255.1 | 227.9 | 205.1 |
| 52.5°  | 220.0 | 284.5 | 318.7  | 349.3 | 372.1 | 339.3 | 291.5 | 259.0 | 229.7 | 204.3 | 186.3 |
| 55°    | 190.2 | 238.4 | 269.6  | 303.3 | 328.7 | 307.3 | 263.0 | 231.4 | 206.0 | 185.0 | 169.6 |
| 57.5°  | 161.7 | 203.8 | 229.2  | 259.0 | 286.2 | 270.0 | 234.5 | 207.3 | 185.0 | 166.6 | 153.0 |
| 60°    | 137.6 | 171.8 | 191.5  | 214.8 | 248.5 | 237.1 | 207.8 | 182.8 | 164.8 | 148.2 | 136.8 |
| 62.5°  | 117.0 | 144.2 | 160.9  | 177.5 | 208.2 | 202.9 | 180.1 | 160.9 | 145.5 | 131.5 | 121.9 |
| 65°    | 96.0  | 118.3 | 131.5  | 146.0 | 170.5 | 172.7 | 154.3 | 140.7 | 126.7 | 114.4 | 105.6 |
| 67.5°  | 77.6  | 95.1  | 106.9  | 119.2 | 138.9 | 145.1 | 132.4 | 121.0 | 109.1 | 99.1  | 91.2  |
| 70°    | 62.7  | 75.0  | 83.7   | 93.4  | 109.6 | 117.0 | 110.5 | 102.6 | 92.9  | 84.6  | 77.6  |
| 72.5°  | 49.5  | 57.4  | 62.7   | 70.1  | 83.3  | 90.7  | 90.3  | 83.3  | 76.3  | 70.6  | 64.9  |
| 75°    | 36.4  | 42.5  | 46.9   | 51.7  | 62.2  | 69.3  | 71.0  | 67.9  | 60.9  | 56.5  | 52.2  |
| 77.5°  | 27.6  | 31.1  | 33.3   | 36.8  | 44.3  | 50.4  | 53.0  | 52.2  | 47.3  | 43.8  | 40.8  |
| 80°    | 21.0  | 21.9  | 22.8   | 24.1  | 30.2  | 35.9  | 37.7  | 37.3  | 34.6  | 33.3  | 29.8  |
| 82.5°  | 14.9  | 15.3  | 15.8   | 16.2  | 18.4  | 23.2  | 25.0  | 25.9  | 23.7  | 22.4  | 19.3  |
| 85°    | 8.8   | 9.2   | 9.2    | 10.1  | 10.5  | 11.8  | 14.9  | 14.9  | 14.5  | 12.7  | 12.3  |
| 87.5°  | 4.4   | 4.4   | 3.9    | 3.9   | 4.4   | 4.8   | 5.7   | 6.6   | 5.7   | 5.3   | 4.8   |
| 90°    | 4.7   | 4.2   | 3.9    | 3.5   | 2.7   | 1.9   | 1.1   | 0.3   | 1.1   | 1.9   | 2.7   |
| 92.5°  | 7.1   | 6.9   | 6.8    | 6.9   | 7.2   | 7.5   | 7.8   | 8.1   | 7.8   | 7.5   | 7.2   |
| 95°    | 11.1  | 10.6  | 10.3   | 11.5  | 13.9  | 16.2  | 18.6  | 21.0  | 18.6  | 16.2  | 13.9  |
| 97.5°  | 13.0  | 11.9  | 11.3   | 14.2  | 20.1  | 26.0  | 31.8  | 37.7  | 31.8  | 26.0  | 20.1  |
| 100°   | 14.7  | 13.5  | 12.9   | 17.8  | 27.6  | 37.5  | 47.3  | 57.1  | 47.3  | 37.5  | 27.6  |
| 102.5° | 58.1  | 71.2  | 77.7   | 77.8  | 77.9  | 78.0  | 78.2  | 78.3  | 78.2  | 78.0  | 77.9  |
| 105°   | 78.4  | 97.9  | 107.7  | 106.6 | 104.5 | 102.3 | 100.2 | 98.0  | 100.2 | 102.3 | 104.5 |
| 107.5° | 92.8  | 116.9 | 129.0  | 128.1 | 126.3 | 124.5 | 122.7 | 120.9 | 122.7 | 124.5 | 126.3 |
| 110°   | 118.5 | 139.2 | 149.6  | 148.8 | 147.3 | 145.8 | 144.3 | 142.8 | 144.3 | 145.8 | 147.3 |



TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 150°  | 155°  | 157.5° | 160°  | 165°  | 170°  | 175°  | 180°  | 185°  | 190°  | 195°  |
|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 167.5 | 168.7 | 169.3  | 168.7 | 167.4 | 166.1 | 164.8 | 163.5 | 164.8 | 166.1 | 167.4 |
| 115°   | 193.6 | 191.8 | 190.9  | 190.3 | 189.1 | 187.8 | 186.6 | 185.4 | 186.6 | 187.8 | 189.1 |
| 117.5° | 212.6 | 211.4 | 210.8  | 210.1 | 208.7 | 207.2 | 205.8 | 204.4 | 205.8 | 207.2 | 208.7 |
| 120°   | 232.4 | 231.1 | 230.5  | 230.0 | 228.9 | 227.8 | 226.8 | 225.7 | 226.8 | 227.8 | 228.9 |
| 122.5° | 251.0 | 249.6 | 248.9  | 248.3 | 247.2 | 246.0 | 244.9 | 243.7 | 244.9 | 246.0 | 247.2 |
| 125°   | 268.3 | 267.0 | 266.3  | 265.8 | 264.9 | 264.0 | 263.0 | 262.1 | 263.0 | 264.0 | 264.9 |
| 127.5° | 285.0 | 283.9 | 283.4  | 282.9 | 281.9 | 280.9 | 279.9 | 278.9 | 279.9 | 280.9 | 281.9 |
| 130°   | 301.0 | 300.2 | 299.8  | 299.2 | 298.1 | 297.0 | 295.8 | 294.7 | 295.8 | 297.0 | 298.1 |
| 132.5° | 316.2 | 315.4 | 315.0  | 314.5 | 313.6 | 312.7 | 311.7 | 310.8 | 311.7 | 312.7 | 313.6 |
| 135°   | 330.5 | 329.8 | 329.5  | 328.9 | 327.8 | 326.6 | 325.5 | 324.3 | 325.5 | 326.6 | 327.8 |
| 137.5° | 343.5 | 342.8 | 342.4  | 342.0 | 341.1 | 340.2 | 339.4 | 338.5 | 339.4 | 340.2 | 341.1 |
| 140°   | 356.2 | 355.4 | 355.0  | 354.7 | 354.1 | 353.6 | 353.0 | 352.4 | 353.0 | 353.6 | 354.1 |
| 142.5° | 367.6 | 366.7 | 366.2  | 366.0 | 365.5 | 365.0 | 364.5 | 364.0 | 364.5 | 365.0 | 365.5 |
| 145°   | 377.7 | 376.5 | 375.9  | 375.9 | 376.0 | 376.1 | 376.1 | 376.2 | 376.1 | 376.1 | 376.0 |
| 147.5° | 387.7 | 386.5 | 385.9  | 386.0 | 386.2 | 386.5 | 386.7 | 386.9 | 386.7 | 386.5 | 386.2 |
| 150°   | 396.6 | 395.5 | 394.9  | 395.2 | 395.7 | 396.2 | 396.7 | 397.2 | 396.7 | 396.2 | 395.7 |
| 152.5° | 404.9 | 403.8 | 403.3  | 403.6 | 404.2 | 404.7 | 405.3 | 405.9 | 405.3 | 404.7 | 404.2 |
| 155°   | 412.7 | 411.8 | 411.4  | 411.7 | 412.4 | 413.0 | 413.7 | 414.3 | 413.7 | 413.0 | 412.4 |
| 157.5° | 419.5 | 418.8 | 418.5  | 418.8 | 419.4 | 419.9 | 420.5 | 421.1 | 420.5 | 419.9 | 419.4 |
| 160°   | 425.6 | 425.1 | 424.9  | 425.1 | 425.6 | 426.0 | 426.5 | 426.9 | 426.5 | 426.0 | 425.6 |
| 162.5° | 430.6 | 430.3 | 430.1  | 430.3 | 430.7 | 431.2 | 431.6 | 432.0 | 431.6 | 431.2 | 430.7 |
| 165°   | 434.9 | 434.7 | 434.6  | 434.8 | 435.2 | 435.7 | 436.1 | 436.5 | 436.1 | 435.7 | 435.2 |
| 167.5° | 438.4 | 438.2 | 438.1  | 438.3 | 438.8 | 439.2 | 439.7 | 440.1 | 439.7 | 439.2 | 438.8 |
| 170°   | 441.2 | 441.1 | 441.0  | 441.2 | 441.7 | 442.1 | 442.6 | 443.0 | 442.6 | 442.1 | 441.7 |
| 172.5° | 443.2 | 443.1 | 443.0  | 443.2 | 443.6 | 444.1 | 444.5 | 444.9 | 444.5 | 444.1 | 443.6 |
| 175°   | 444.5 | 444.4 | 444.3  | 444.5 | 445.0 | 445.5 | 446.0 | 446.5 | 446.0 | 445.5 | 445.0 |
| 177.5° | 445.0 | 444.9 | 444.9  | 445.2 | 445.7 | 446.2 | 446.7 | 447.2 | 446.7 | 446.2 | 445.7 |
| 180°   | 445.6 | 445.6 | 445.6  | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 |

TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 200°  | 202.5° | 205°  | 210°  | 215°  | 220°  | 225°  | 230°  | 235°  | 240°  | 245°  |
|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 630.7 | 630.7  | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 |
| 2.5°   | 623.7 | 624.2  | 625.5 | 621.5 | 615.4 | 612.8 | 604.9 | 603.6 | 602.3 | 602.3 | 603.6 |
| 5°     | 609.7 | 607.9  | 608.4 | 600.9 | 592.2 | 586.9 | 576.0 | 577.7 | 572.0 | 568.5 | 569.4 |
| 7.5°   | 594.4 | 589.5  | 589.1 | 579.5 | 568.5 | 558.9 | 547.5 | 544.8 | 539.6 | 533.4 | 530.8 |
| 10°    | 575.1 | 571.6  | 565.0 | 554.0 | 540.0 | 532.1 | 516.8 | 507.6 | 506.3 | 497.1 | 493.5 |
| 12.5°  | 555.4 | 549.2  | 542.6 | 527.3 | 511.5 | 498.8 | 487.4 | 477.3 | 470.3 | 462.4 | 457.2 |
| 15°    | 532.6 | 525.1  | 517.7 | 501.4 | 483.0 | 470.3 | 453.2 | 438.3 | 417.7 | 401.5 | 392.3 |
| 17.5°  | 507.6 | 499.2  | 489.2 | 471.2 | 453.2 | 435.7 | 404.1 | 386.6 | 372.1 | 362.5 | 356.8 |
| 20°    | 481.7 | 472.5  | 462.4 | 444.5 | 413.3 | 382.7 | 365.1 | 351.5 | 342.8 | 333.1 | 326.1 |
| 22.5°  | 454.5 | 444.9  | 433.9 | 405.9 | 373.0 | 351.5 | 337.9 | 325.2 | 312.5 | 307.3 | 303.8 |
| 25°    | 429.1 | 420.3  | 406.3 | 368.2 | 342.3 | 322.6 | 307.3 | 298.9 | 292.4 | 285.3 | 278.8 |
| 27.5°  | 402.8 | 386.6  | 366.9 | 334.9 | 318.7 | 298.5 | 287.5 | 281.4 | 270.0 | 265.2 | 262.1 |
| 30°    | 371.3 | 353.3  | 334.4 | 311.6 | 292.8 | 278.8 | 268.7 | 258.6 | 252.0 | 247.2 | 242.0 |
| 32.5°  | 339.3 | 322.2  | 310.3 | 286.7 | 272.6 | 258.2 | 248.5 | 242.4 | 232.7 | 229.7 | 227.5 |
| 35°    | 311.6 | 297.2  | 286.7 | 267.4 | 254.2 | 241.1 | 234.1 | 224.9 | 218.7 | 213.0 | 209.5 |
| 37.5°  | 284.5 | 276.6  | 265.6 | 249.4 | 235.4 | 224.9 | 215.2 | 212.1 | 203.8 | 200.8 | 197.2 |
| 40°    | 265.6 | 253.8  | 244.6 | 230.6 | 218.7 | 207.3 | 201.2 | 194.2 | 188.5 | 183.7 | 182.3 |
| 42.5°  | 242.8 | 234.1  | 228.8 | 213.5 | 201.2 | 194.6 | 187.2 | 179.3 | 174.9 | 170.9 | 166.1 |
| 45°    | 225.7 | 217.8  | 210.4 | 198.1 | 187.2 | 178.8 | 172.3 | 167.0 | 159.5 | 157.8 | 150.3 |
| 47.5°  | 207.8 | 199.9  | 194.2 | 181.9 | 171.8 | 163.9 | 159.1 | 152.1 | 146.0 | 142.0 | 138.5 |
| 50°    | 189.8 | 183.2  | 178.0 | 167.4 | 158.7 | 150.3 | 143.8 | 136.8 | 134.1 | 127.6 | 125.4 |
| 52.5°  | 172.7 | 168.3  | 162.6 | 152.5 | 143.8 | 136.8 | 129.7 | 124.0 | 120.1 | 116.6 | 114.0 |
| 55°    | 158.2 | 151.2  | 148.6 | 137.6 | 130.2 | 122.7 | 116.6 | 113.1 | 108.3 | 106.1 | 103.9 |
| 57.5°  | 142.0 | 138.1  | 133.7 | 125.4 | 117.0 | 110.0 | 105.6 | 100.4 | 97.7  | 95.1  | 93.4  |
| 60°    | 128.0 | 122.3  | 118.8 | 111.8 | 104.3 | 97.7  | 93.8  | 89.9  | 86.3  | 84.2  | 80.7  |
| 62.5°  | 111.8 | 107.4  | 105.2 | 97.7  | 91.6  | 85.5  | 82.0  | 78.0  | 75.4  | 71.4  | 67.1  |
| 65°    | 97.7  | 94.2   | 91.6  | 85.5  | 79.8  | 74.1  | 70.6  | 65.7  | 62.2  | 60.0  | 59.6  |
| 67.5°  | 85.5  | 82.8   | 78.9  | 73.2  | 67.5  | 63.1  | 59.2  | 55.2  | 54.8  | 53.9  | 53.9  |
| 70°    | 71.9  | 69.3   | 67.1  | 60.9  | 56.1  | 51.3  | 50.4  | 49.1  | 47.8  | 47.3  | 46.5  |
| 72.5°  | 60.0  | 57.9   | 55.2  | 50.0  | 45.1  | 43.8  | 43.0  | 42.1  | 40.8  | 40.3  | 39.9  |
| 75°    | 48.7  | 45.6   | 43.8  | 39.0  | 37.7  | 36.8  | 35.9  | 34.6  | 33.8  | 33.3  | 32.4  |
| 77.5°  | 37.3  | 34.2   | 34.2  | 31.6  | 30.7  | 29.4  | 28.5  | 27.6  | 27.2  | 26.3  | 26.3  |
| 80°    | 26.3  | 26.3   | 25.4  | 24.1  | 22.8  | 22.4  | 21.0  | 20.6  | 20.2  | 20.6  | 19.7  |
| 82.5°  | 19.3  | 17.5   | 17.5  | 16.7  | 15.8  | 15.3  | 14.5  | 14.5  | 14.0  | 14.0  | 14.0  |
| 85°    | 11.0  | 11.0   | 10.5  | 9.6   | 9.2   | 9.2   | 8.8   | 8.8   | 8.3   | 8.3   | 7.9   |
| 87.5°  | 4.4   | 3.9    | 4.4   | 3.9   | 3.9   | 3.5   | 3.5   | 3.5   | 3.1   | 3.5   | 3.1   |
| 90°    | 3.5   | 3.9    | 4.2   | 4.7   | 5.3   | 5.8   | 6.4   | 6.8   | 7.2   | 7.5   | 7.9   |
| 92.5°  | 6.9   | 6.8    | 6.9   | 7.1   | 7.3   | 7.5   | 7.7   | 7.9   | 8.0   | 8.2   | 8.3   |
| 95°    | 11.5  | 10.3   | 10.6  | 11.1  | 11.6  | 12.1  | 12.6  | 13.0  | 13.3  | 13.7  | 14.0  |
| 97.5°  | 14.2  | 11.3   | 11.9  | 13.0  | 14.1  | 15.3  | 16.4  | 16.6  | 16.8  | 17.1  | 17.3  |
| 100°   | 17.8  | 12.9   | 13.5  | 14.7  | 16.0  | 17.2  | 18.4  | 19.0  | 19.6  | 20.1  | 20.7  |
| 102.5° | 77.8  | 77.7   | 71.2  | 58.1  | 45.1  | 32.0  | 19.0  | 19.8  | 20.6  | 21.4  | 22.2  |
| 105°   | 106.6 | 107.7  | 97.9  | 78.4  | 58.8  | 39.3  | 19.7  | 20.5  | 21.3  | 22.0  | 22.8  |
| 107.5° | 128.1 | 129.0  | 116.9 | 92.8  | 68.6  | 44.5  | 20.3  | 21.1  | 21.9  | 22.7  | 23.5  |
| 110°   | 148.8 | 149.6  | 139.2 | 118.5 | 97.8  | 77.1  | 56.4  | 49.2  | 42.1  | 34.9  | 27.8  |

TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 200°  | 202.5° | 205°  | 210°  | 215°  | 220°  | 225°  | 230°  | 235°  | 240°  | 245°  |
|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 168.7 | 169.3  | 168.7 | 167.5 | 166.2 | 165.0 | 163.8 | 132.9 | 102.0 | 71.1  | 40.2  |
| 115°   | 190.3 | 190.9  | 191.8 | 193.6 | 195.3 | 197.1 | 198.9 | 165.7 | 132.5 | 99.4  | 66.2  |
| 117.5° | 210.1 | 210.8  | 211.4 | 212.6 | 213.9 | 215.1 | 216.3 | 206.1 | 195.8 | 185.6 | 175.3 |
| 120°   | 230.0 | 230.5  | 231.1 | 232.4 | 233.7 | 235.0 | 236.3 | 237.2 | 238.0 | 238.9 | 239.8 |
| 122.5° | 248.3 | 248.9  | 249.6 | 251.0 | 252.5 | 253.9 | 255.3 | 255.7 | 256.2 | 256.6 | 257.1 |
| 125°   | 265.8 | 266.3  | 267.0 | 268.3 | 269.7 | 271.0 | 272.4 | 272.9 | 273.4 | 273.9 | 274.4 |
| 127.5° | 282.9 | 283.4  | 283.9 | 285.0 | 286.1 | 287.1 | 288.2 | 288.9 | 289.6 | 290.3 | 291.0 |
| 130°   | 299.2 | 299.8  | 300.2 | 301.0 | 301.8 | 302.6 | 303.4 | 304.2 | 305.0 | 305.7 | 306.5 |
| 132.5° | 314.5 | 315.0  | 315.4 | 316.2 | 316.9 | 317.7 | 318.5 | 319.1 | 319.8 | 320.4 | 321.1 |
| 135°   | 328.9 | 329.5  | 329.8 | 330.5 | 331.1 | 331.8 | 332.4 | 333.1 | 333.8 | 334.5 | 335.2 |
| 137.5° | 342.0 | 342.4  | 342.8 | 343.5 | 344.2 | 344.9 | 345.6 | 346.3 | 347.0 | 347.7 | 348.4 |
| 140°   | 354.7 | 355.0  | 355.4 | 356.2 | 356.9 | 357.7 | 358.5 | 359.1 | 359.8 | 360.4 | 361.1 |
| 142.5° | 366.0 | 366.2  | 366.7 | 367.6 | 368.5 | 369.5 | 370.4 | 371.0 | 371.6 | 372.1 | 372.7 |
| 145°   | 375.9 | 375.9  | 376.5 | 377.7 | 379.0 | 380.2 | 381.4 | 381.9 | 382.4 | 382.9 | 383.4 |
| 147.5° | 386.0 | 385.9  | 386.5 | 387.7 | 389.0 | 390.2 | 391.4 | 391.8 | 392.1 | 392.5 | 392.8 |
| 150°   | 395.2 | 394.9  | 395.5 | 396.6 | 397.8 | 398.9 | 400.1 | 400.5 | 400.9 | 401.4 | 401.8 |
| 152.5° | 403.6 | 403.3  | 403.8 | 404.9 | 406.0 | 407.1 | 408.2 | 408.6 | 409.0 | 409.5 | 409.9 |
| 155°   | 411.7 | 411.4  | 411.8 | 412.7 | 413.6 | 414.4 | 415.3 | 415.7 | 416.1 | 416.6 | 417.0 |
| 157.5° | 418.8 | 418.5  | 418.8 | 419.5 | 420.1 | 420.8 | 421.4 | 421.9 | 422.4 | 422.9 | 423.4 |
| 160°   | 425.1 | 424.9  | 425.1 | 425.6 | 426.0 | 426.5 | 426.9 | 427.3 | 427.7 | 428.2 | 428.6 |
| 162.5° | 430.3 | 430.1  | 430.3 | 430.6 | 431.0 | 431.3 | 431.7 | 432.2 | 432.7 | 433.2 | 433.7 |
| 165°   | 434.8 | 434.6  | 434.7 | 434.9 | 435.2 | 435.4 | 435.6 | 436.1 | 436.6 | 437.1 | 437.6 |
| 167.5° | 438.3 | 438.1  | 438.2 | 438.4 | 438.7 | 438.9 | 439.1 | 439.6 | 440.1 | 440.6 | 441.1 |
| 170°   | 441.2 | 441.0  | 441.1 | 441.2 | 441.4 | 441.5 | 441.7 | 442.2 | 442.7 | 443.2 | 443.7 |
| 172.5° | 443.2 | 443.0  | 443.1 | 443.2 | 443.3 | 443.5 | 443.6 | 444.1 | 444.6 | 445.1 | 445.6 |
| 175°   | 444.5 | 444.3  | 444.4 | 444.5 | 444.6 | 444.8 | 444.9 | 445.4 | 445.9 | 446.4 | 446.9 |
| 177.5° | 445.2 | 444.9  | 444.9 | 445.0 | 445.1 | 445.1 | 445.2 | 445.7 | 446.2 | 446.7 | 447.2 |
| 180°   | 445.6 | 445.6  | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 |

TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 250°  | 255°  | 260°  | 265°  | 270°  | 275°  | 280°  | 285°  | 290°  | 292.5° |
|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 0°     | 630.7  | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7  |
| 2.5°   | 603.6  | 602.7 | 600.1 | 600.9 | 599.6 | 599.6 | 598.7 | 598.7 | 598.7 | 600.9 | 599.6  |
| 5°     | 570.7  | 567.6 | 564.6 | 563.2 | 561.9 | 560.6 | 560.6 | 560.2 | 564.1 | 563.2 | 566.7  |
| 7.5°   | 529.9  | 529.1 | 522.9 | 522.9 | 520.7 | 519.8 | 522.0 | 522.5 | 522.9 | 523.8 | 526.0  |
| 10°    | 493.5  | 491.4 | 482.6 | 483.5 | 482.2 | 480.4 | 481.7 | 480.8 | 483.9 | 484.8 | 483.9  |
| 12.5°  | 450.6  | 446.6 | 437.0 | 432.2 | 426.9 | 423.0 | 427.8 | 424.3 | 436.6 | 440.1 | 449.7  |
| 15°    | 393.6  | 386.2 | 379.6 | 379.6 | 374.8 | 371.3 | 373.4 | 377.4 | 380.0 | 384.0 | 385.7  |
| 17.5°  | 355.5  | 352.4 | 347.1 | 344.1 | 342.8 | 341.5 | 341.5 | 343.2 | 348.9 | 348.5 | 352.0  |
| 20°    | 323.0  | 321.3 | 318.7 | 314.7 | 313.4 | 312.5 | 312.5 | 312.5 | 316.5 | 320.0 | 322.2  |
| 22.5°  | 300.7  | 299.4 | 297.6 | 292.4 | 289.7 | 288.9 | 291.0 | 292.4 | 295.4 | 298.1 | 300.2  |
| 25°    | 278.3  | 275.3 | 272.2 | 270.4 | 269.1 | 269.1 | 270.0 | 270.4 | 271.8 | 273.1 | 275.7  |
| 27.5°  | 259.9  | 257.7 | 253.3 | 248.5 | 248.5 | 247.2 | 248.1 | 249.0 | 252.0 | 256.4 | 258.6  |
| 30°    | 239.3  | 238.9 | 237.1 | 235.4 | 233.6 | 232.7 | 234.5 | 235.8 | 236.3 | 238.4 | 238.4  |
| 32.5°  | 224.4  | 221.4 | 218.3 | 216.5 | 215.7 | 215.2 | 215.7 | 217.4 | 217.4 | 220.0 | 223.1  |
| 35°    | 209.5  | 207.8 | 204.7 | 201.6 | 200.8 | 198.6 | 200.3 | 202.1 | 205.1 | 206.4 | 207.8  |
| 37.5°  | 193.3  | 191.1 | 189.8 | 188.9 | 187.2 | 187.6 | 186.3 | 188.9 | 191.5 | 191.1 | 192.0  |
| 40°    | 181.0  | 177.1 | 173.1 | 172.7 | 172.3 | 171.8 | 171.8 | 172.3 | 174.0 | 175.8 | 178.4  |
| 42.5°  | 165.2  | 163.9 | 160.4 | 156.9 | 156.0 | 155.2 | 154.3 | 156.0 | 159.5 | 162.6 | 163.9  |
| 45°    | 149.0  | 147.3 | 146.4 | 143.8 | 142.0 | 141.6 | 140.7 | 142.9 | 146.0 | 147.3 | 148.2  |
| 47.5°  | 134.1  | 133.7 | 131.1 | 131.5 | 130.2 | 130.6 | 130.2 | 131.5 | 131.5 | 132.8 | 133.7  |
| 50°    | 124.0  | 122.7 | 121.4 | 120.5 | 119.2 | 119.2 | 118.8 | 119.2 | 121.0 | 122.7 | 122.3  |
| 52.5°  | 114.0  | 111.8 | 111.3 | 110.9 | 110.0 | 110.9 | 109.6 | 110.0 | 111.8 | 112.6 | 112.2  |
| 55°    | 102.1  | 101.7 | 100.8 | 99.9  | 99.5  | 99.1  | 99.1  | 99.1  | 100.8 | 102.1 | 102.6  |
| 57.5°  | 92.9   | 90.7  | 89.0  | 89.0  | 87.2  | 86.8  | 87.7  | 88.1  | 89.4  | 90.3  | 91.2   |
| 60°    | 80.2   | 79.3  | 76.7  | 75.4  | 72.8  | 72.3  | 72.3  | 74.1  | 76.3  | 79.3  | 80.2   |
| 62.5°  | 66.6   | 65.3  | 64.9  | 64.9  | 64.9  | 64.9  | 64.9  | 64.9  | 64.9  | 65.3  | 65.3   |
| 65°    | 59.2   | 59.6  | 59.2  | 58.7  | 59.2  | 59.2  | 58.7  | 58.7  | 58.7  | 59.2  | 59.6   |
| 67.5°  | 53.0   | 52.6  | 53.0  | 52.6  | 52.2  | 52.2  | 51.7  | 52.2  | 52.6  | 53.0  | 53.0   |
| 70°    | 46.0   | 46.0  | 45.6  | 46.0  | 45.6  | 45.1  | 44.7  | 44.7  | 45.6  | 46.0  | 46.0   |
| 72.5°  | 39.4   | 39.4  | 39.0  | 39.0  | 38.1  | 38.1  | 38.6  | 38.1  | 38.1  | 39.4  | 39.4   |
| 75°    | 32.9   | 32.4  | 32.0  | 32.0  | 31.6  | 31.6  | 31.6  | 31.1  | 32.0  | 32.0  | 32.4   |
| 77.5°  | 25.9   | 25.9  | 25.9  | 25.4  | 25.4  | 25.0  | 25.0  | 25.4  | 25.4  | 25.4  | 25.9   |
| 80°    | 19.7   | 19.7  | 19.7  | 19.3  | 18.8  | 18.8  | 18.8  | 18.8  | 18.8  | 19.3  | 18.8   |
| 82.5°  | 13.6   | 13.6  | 13.6  | 13.6  | 13.6  | 13.1  | 13.1  | 13.1  | 13.6  | 13.6  | 13.1   |
| 85°    | 8.3    | 7.9   | 8.3   | 8.3   | 7.9   | 8.3   | 7.9   | 7.9   | 7.5   | 7.5   | 7.9    |
| 87.5°  | 3.5    | 3.1   | 2.6   | 2.6   | 3.1   | 2.6   | 2.6   | 2.6   | 3.1   | 2.6   | 2.6    |
| 90°    | 8.1    | 8.2   | 8.3   | 8.4   | 8.6   | 8.7   | 8.6   | 8.4   | 8.3   | 8.2   | 8.1    |
| 92.5°  | 8.4    | 8.4   | 8.5   | 8.6   | 8.6   | 8.7   | 8.6   | 8.6   | 8.5   | 8.4   | 8.4    |
| 95°    | 14.2   | 14.2  | 14.1  | 14.0  | 14.0  | 13.9  | 14.0  | 14.0  | 14.1  | 14.2  | 14.2   |
| 97.5°  | 17.4   | 17.4  | 17.5  | 17.6  | 17.6  | 17.7  | 17.6  | 17.6  | 17.5  | 17.4  | 17.4   |
| 100°   | 21.0   | 21.1  | 21.2  | 21.3  | 21.5  | 21.6  | 21.5  | 21.3  | 21.2  | 21.1  | 21.0   |
| 102.5° | 22.6   | 22.7  | 22.9  | 23.1  | 23.3  | 23.5  | 23.3  | 23.1  | 22.9  | 22.7  | 22.6   |
| 105°   | 23.2   | 23.3  | 23.6  | 23.9  | 24.2  | 24.5  | 24.2  | 23.9  | 23.6  | 23.3  | 23.2   |
| 107.5° | 23.9   | 24.0  | 24.3  | 24.6  | 24.8  | 25.1  | 24.8  | 24.6  | 24.3  | 24.0  | 23.9   |
| 110°   | 24.2   | 24.3  | 24.6  | 24.9  | 25.2  | 25.5  | 25.2  | 24.9  | 24.6  | 24.3  | 24.2   |

TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 250°  | 255°  | 260°  | 265°  | 270°  | 275°  | 280°  | 285°  | 290°  | 292.5° |
|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 112.5° | 24.8   | 24.9  | 25.1  | 25.4  | 25.6  | 25.8  | 25.6  | 25.4  | 25.1  | 24.9  | 24.8   |
| 115°   | 49.6   | 47.0  | 41.9  | 36.7  | 31.6  | 26.4  | 31.6  | 36.7  | 41.9  | 47.0  | 49.6   |
| 117.5° | 170.2  | 160.8 | 142.1 | 123.3 | 104.6 | 85.8  | 104.6 | 123.3 | 142.1 | 160.8 | 170.2  |
| 120°   | 240.2  | 235.4 | 225.7 | 216.0 | 206.4 | 196.7 | 206.4 | 216.0 | 225.7 | 235.4 | 240.2  |
| 122.5° | 257.3  | 257.3 | 257.4 | 257.5 | 257.5 | 257.6 | 257.5 | 257.5 | 257.4 | 257.3 | 257.3  |
| 125°   | 274.7  | 274.8 | 275.0 | 275.3 | 275.5 | 275.7 | 275.5 | 275.3 | 275.0 | 274.8 | 274.7  |
| 127.5° | 291.4  | 291.4 | 291.5 | 291.6 | 291.7 | 291.8 | 291.7 | 291.6 | 291.5 | 291.4 | 291.4  |
| 130°   | 306.9  | 306.9 | 306.8 | 306.7 | 306.7 | 306.6 | 306.7 | 306.7 | 306.8 | 306.9 | 306.9  |
| 132.5° | 321.4  | 321.4 | 321.3 | 321.2 | 321.2 | 321.1 | 321.2 | 321.2 | 321.3 | 321.4 | 321.4  |
| 135°   | 335.6  | 335.5 | 335.4 | 335.3 | 335.1 | 335.0 | 335.1 | 335.3 | 335.4 | 335.5 | 335.6  |
| 137.5° | 348.8  | 348.7 | 348.5 | 348.3 | 348.1 | 347.9 | 348.1 | 348.3 | 348.5 | 348.7 | 348.8  |
| 140°   | 361.4  | 361.2 | 360.9 | 360.5 | 360.2 | 359.8 | 360.2 | 360.5 | 360.9 | 361.2 | 361.4  |
| 142.5° | 373.0  | 372.8 | 372.5 | 372.1 | 371.8 | 371.4 | 371.8 | 372.1 | 372.5 | 372.8 | 373.0  |
| 145°   | 383.7  | 383.5 | 383.1 | 382.8 | 382.4 | 382.0 | 382.4 | 382.8 | 383.1 | 383.5 | 383.7  |
| 147.5° | 393.0  | 392.9 | 392.6 | 392.3 | 392.0 | 391.7 | 392.0 | 392.3 | 392.6 | 392.9 | 393.0  |
| 150°   | 402.0  | 401.8 | 401.5 | 401.1 | 400.8 | 400.4 | 400.8 | 401.1 | 401.5 | 401.8 | 402.0  |
| 152.5° | 410.1  | 409.8 | 409.3 | 408.8 | 408.3 | 407.8 | 408.3 | 408.8 | 409.3 | 409.8 | 410.1  |
| 155°   | 417.2  | 416.9 | 416.3 | 415.8 | 415.2 | 414.6 | 415.2 | 415.8 | 416.3 | 416.9 | 417.2  |
| 157.5° | 423.6  | 423.3 | 422.8 | 422.2 | 421.7 | 421.1 | 421.7 | 422.2 | 422.8 | 423.3 | 423.6  |
| 160°   | 428.8  | 428.5 | 428.0 | 427.5 | 427.0 | 426.5 | 427.0 | 427.5 | 428.0 | 428.5 | 428.8  |
| 162.5° | 434.0  | 433.7 | 433.0 | 432.3 | 431.7 | 431.0 | 431.7 | 432.3 | 433.0 | 433.7 | 434.0  |
| 165°   | 437.8  | 437.6 | 437.1 | 436.6 | 436.1 | 435.6 | 436.1 | 436.6 | 437.1 | 437.6 | 437.8  |
| 167.5° | 441.4  | 441.1 | 440.4 | 439.8 | 439.1 | 438.5 | 439.1 | 439.8 | 440.4 | 441.1 | 441.4  |
| 170°   | 443.9  | 443.6 | 442.9 | 442.3 | 441.6 | 441.0 | 441.6 | 442.3 | 442.9 | 443.6 | 443.9  |
| 172.5° | 445.9  | 445.6 | 444.9 | 444.3 | 443.6 | 443.0 | 443.6 | 444.3 | 444.9 | 445.6 | 445.9  |
| 175°   | 447.2  | 446.8 | 446.1 | 445.4 | 444.6 | 443.9 | 444.6 | 445.4 | 446.1 | 446.8 | 447.2  |
| 177.5° | 447.5  | 447.2 | 446.5 | 445.9 | 445.2 | 444.6 | 445.2 | 445.9 | 446.5 | 447.2 | 447.5  |
| 180°   | 445.6  | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6  |

TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 295°  | 300°  | 305°  | 310°  | 315°  | 320°  | 325°  | 330°  | 335°  | 337.5° | 340°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 0°     | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7 | 630.7  | 630.7 |
| 2.5°   | 600.9 | 603.1 | 602.3 | 597.4 | 602.3 | 603.6 | 606.2 | 608.8 | 610.6 | 613.2  | 615.4 |
| 5°     | 563.2 | 567.6 | 570.3 | 567.6 | 576.4 | 577.7 | 583.8 | 587.3 | 592.6 | 597.0  | 600.5 |
| 7.5°   | 527.7 | 531.2 | 536.5 | 537.4 | 542.6 | 548.8 | 557.5 | 566.3 | 574.6 | 579.0  | 583.0 |
| 10°    | 489.6 | 495.7 | 503.6 | 501.9 | 509.8 | 519.4 | 528.6 | 542.6 | 549.7 | 557.5  | 564.6 |
| 12.5°  | 451.5 | 455.4 | 465.9 | 469.4 | 480.8 | 488.3 | 501.0 | 509.8 | 527.3 | 536.5  | 542.6 |
| 15°    | 384.8 | 401.1 | 414.2 | 430.0 | 444.9 | 458.9 | 470.3 | 486.1 | 501.4 | 508.5  | 518.5 |
| 17.5°  | 354.6 | 362.1 | 369.9 | 377.8 | 397.1 | 422.1 | 442.3 | 459.4 | 472.5 | 481.7  | 493.5 |
| 20°    | 323.0 | 330.5 | 339.3 | 346.7 | 358.5 | 376.5 | 401.5 | 430.9 | 446.6 | 456.3  | 467.7 |
| 22.5°  | 300.7 | 307.7 | 313.4 | 320.0 | 329.2 | 342.3 | 361.2 | 397.6 | 418.6 | 430.4  | 440.5 |
| 25°    | 276.6 | 285.3 | 291.5 | 296.3 | 303.8 | 318.2 | 333.6 | 354.2 | 391.9 | 401.1  | 415.1 |
| 27.5°  | 259.9 | 262.6 | 269.6 | 277.0 | 284.5 | 292.4 | 308.1 | 325.7 | 351.1 | 371.3  | 388.4 |
| 30°    | 240.2 | 246.8 | 253.3 | 256.4 | 263.0 | 274.4 | 284.0 | 302.9 | 322.6 | 338.4  | 359.0 |
| 32.5°  | 225.3 | 229.2 | 233.6 | 241.1 | 247.2 | 255.1 | 264.7 | 280.5 | 297.2 | 307.3  | 323.0 |
| 35°    | 208.6 | 211.3 | 220.5 | 223.5 | 229.7 | 237.6 | 247.2 | 259.5 | 277.5 | 285.3  | 296.7 |
| 37.5°  | 192.9 | 199.0 | 201.6 | 208.6 | 214.3 | 222.2 | 229.2 | 243.3 | 255.1 | 264.3  | 274.8 |
| 40°    | 180.6 | 183.2 | 188.0 | 194.2 | 199.0 | 205.1 | 213.9 | 224.0 | 236.7 | 244.1  | 253.3 |
| 42.5°  | 165.7 | 167.9 | 174.0 | 177.5 | 185.4 | 191.1 | 196.4 | 208.6 | 220.0 | 225.7  | 234.9 |
| 45°    | 149.5 | 154.7 | 158.7 | 165.7 | 170.1 | 177.1 | 183.7 | 192.4 | 202.9 | 209.5  | 214.8 |
| 47.5°  | 135.4 | 140.7 | 144.6 | 151.2 | 158.2 | 161.3 | 168.3 | 177.5 | 187.2 | 192.4  | 199.9 |
| 50°    | 124.0 | 125.8 | 133.2 | 136.3 | 143.8 | 149.9 | 154.7 | 162.6 | 173.1 | 176.2  | 182.3 |
| 52.5°  | 113.1 | 114.4 | 119.2 | 123.2 | 129.7 | 135.0 | 141.1 | 148.6 | 157.4 | 162.2  | 167.0 |
| 55°    | 103.4 | 104.3 | 106.5 | 110.9 | 115.3 | 121.9 | 127.6 | 134.6 | 142.0 | 147.3  | 151.7 |
| 57.5°  | 92.5  | 94.2  | 96.0  | 98.6  | 103.0 | 109.1 | 115.3 | 121.9 | 128.0 | 131.5  | 137.2 |
| 60°    | 79.8  | 82.4  | 85.5  | 88.5  | 91.6  | 96.0  | 103.0 | 109.1 | 114.8 | 117.9  | 122.3 |
| 62.5°  | 66.2  | 71.4  | 74.1  | 77.6  | 80.2  | 84.2  | 89.4  | 96.4  | 100.4 | 104.3  | 107.8 |
| 65°    | 59.6  | 60.0  | 60.5  | 64.0  | 68.8  | 72.8  | 77.6  | 82.8  | 89.0  | 91.6   | 94.2  |
| 67.5°  | 53.0  | 53.5  | 54.4  | 54.8  | 56.5  | 60.9  | 66.2  | 71.9  | 76.7  | 78.5   | 81.1  |
| 70°    | 46.5  | 46.5  | 48.2  | 48.7  | 49.1  | 49.5  | 53.9  | 59.6  | 64.0  | 66.2   | 69.3  |
| 72.5°  | 39.4  | 39.9  | 40.8  | 41.2  | 42.1  | 43.0  | 44.3  | 47.3  | 52.6  | 54.8   | 58.3  |
| 75°    | 32.4  | 32.9  | 33.3  | 33.8  | 35.1  | 35.5  | 36.8  | 38.6  | 40.8  | 43.4   | 45.6  |
| 77.5°  | 25.9  | 25.9  | 26.3  | 27.2  | 28.1  | 28.5  | 29.8  | 30.7  | 31.6  | 32.9   | 34.6  |
| 80°    | 19.3  | 19.7  | 19.7  | 20.6  | 20.6  | 21.0  | 21.5  | 22.8  | 23.7  | 24.5   | 25.4  |
| 82.5°  | 13.1  | 14.0  | 14.0  | 14.0  | 14.5  | 14.9  | 15.3  | 15.3  | 16.2  | 16.7   | 18.0  |
| 85°    | 7.9   | 8.3   | 8.3   | 8.3   | 7.9   | 8.8   | 8.8   | 9.2   | 9.2   | 9.2    | 9.6   |
| 87.5°  | 3.1   | 2.6   | 3.1   | 3.1   | 3.1   | 3.5   | 3.1   | 3.1   | 3.5   | 3.9    | 3.9   |
| 90°    | 7.9   | 7.5   | 7.2   | 6.8   | 6.4   | 5.8   | 5.3   | 4.7   | 4.2   | 3.9    | 3.5   |
| 92.5°  | 8.3   | 8.2   | 8.0   | 7.9   | 7.7   | 7.5   | 7.3   | 7.1   | 6.9   | 6.8    | 6.9   |
| 95°    | 14.0  | 13.7  | 13.3  | 13.0  | 12.6  | 12.1  | 11.6  | 11.1  | 10.6  | 10.3   | 11.5  |
| 97.5°  | 17.3  | 17.1  | 16.8  | 16.6  | 16.4  | 15.3  | 14.1  | 13.0  | 11.9  | 11.3   | 14.2  |
| 100°   | 20.7  | 20.1  | 19.6  | 19.0  | 18.4  | 17.2  | 16.0  | 14.7  | 13.5  | 12.9   | 17.8  |
| 102.5° | 22.2  | 21.4  | 20.6  | 19.8  | 19.0  | 32.0  | 45.1  | 58.1  | 71.2  | 77.7   | 77.8  |
| 105°   | 22.8  | 22.0  | 21.3  | 20.5  | 19.7  | 39.3  | 58.8  | 78.4  | 97.9  | 107.7  | 106.6 |
| 107.5° | 23.5  | 22.7  | 21.9  | 21.1  | 20.3  | 44.5  | 68.6  | 92.8  | 116.9 | 129.0  | 128.1 |
| 110°   | 27.8  | 34.9  | 42.1  | 49.2  | 56.4  | 77.1  | 97.8  | 118.5 | 139.2 | 149.6  | 148.8 |

TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 295°  | 300°  | 305°  | 310°  | 315°  | 320°  | 325°  | 330°  | 335°  | 337.5° | 340°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 112.5° | 40.2  | 71.1  | 102.0 | 132.9 | 163.8 | 165.0 | 166.2 | 167.5 | 168.7 | 169.3  | 168.7 |
| 115°   | 66.2  | 99.4  | 132.5 | 165.7 | 198.9 | 197.1 | 195.3 | 193.6 | 191.8 | 190.9  | 190.3 |
| 117.5° | 175.3 | 185.6 | 195.8 | 206.1 | 216.3 | 215.1 | 213.9 | 212.6 | 211.4 | 210.8  | 210.1 |
| 120°   | 239.8 | 238.9 | 238.0 | 237.2 | 236.3 | 235.0 | 233.7 | 232.4 | 231.1 | 230.5  | 230.0 |
| 122.5° | 257.1 | 256.6 | 256.2 | 255.7 | 255.3 | 253.9 | 252.5 | 251.0 | 249.6 | 248.9  | 248.3 |
| 125°   | 274.4 | 273.9 | 273.4 | 272.9 | 272.4 | 271.0 | 269.7 | 268.3 | 267.0 | 266.3  | 265.8 |
| 127.5° | 291.0 | 290.3 | 289.6 | 288.9 | 288.2 | 287.1 | 286.1 | 285.0 | 283.9 | 283.4  | 282.9 |
| 130°   | 306.5 | 305.7 | 305.0 | 304.2 | 303.4 | 302.6 | 301.8 | 301.0 | 300.2 | 299.8  | 299.2 |
| 132.5° | 321.1 | 320.4 | 319.8 | 319.1 | 318.5 | 317.7 | 316.9 | 316.2 | 315.4 | 315.0  | 314.5 |
| 135°   | 335.2 | 334.5 | 333.8 | 333.1 | 332.4 | 331.8 | 331.1 | 330.5 | 329.8 | 329.5  | 328.9 |
| 137.5° | 348.4 | 347.7 | 347.0 | 346.3 | 345.6 | 344.9 | 344.2 | 343.5 | 342.8 | 342.4  | 342.0 |
| 140°   | 361.1 | 360.4 | 359.8 | 359.1 | 358.5 | 357.7 | 356.9 | 356.2 | 355.4 | 355.0  | 354.7 |
| 142.5° | 372.7 | 372.1 | 371.6 | 371.0 | 370.4 | 369.5 | 368.5 | 367.6 | 366.7 | 366.2  | 366.0 |
| 145°   | 383.4 | 382.9 | 382.4 | 381.9 | 381.4 | 380.2 | 379.0 | 377.7 | 376.5 | 375.9  | 375.9 |
| 147.5° | 392.8 | 392.5 | 392.1 | 391.8 | 391.4 | 390.2 | 389.0 | 387.7 | 386.5 | 385.9  | 386.0 |
| 150°   | 401.8 | 401.4 | 400.9 | 400.5 | 400.1 | 398.9 | 397.8 | 396.6 | 395.5 | 394.9  | 395.2 |
| 152.5° | 409.9 | 409.5 | 409.0 | 408.6 | 408.2 | 407.1 | 406.0 | 404.9 | 403.8 | 403.3  | 403.6 |
| 155°   | 417.0 | 416.6 | 416.1 | 415.7 | 415.3 | 414.4 | 413.6 | 412.7 | 411.8 | 411.4  | 411.7 |
| 157.5° | 423.4 | 422.9 | 422.4 | 421.9 | 421.4 | 420.8 | 420.1 | 419.5 | 418.8 | 418.5  | 418.8 |
| 160°   | 428.6 | 428.2 | 427.7 | 427.3 | 426.9 | 426.5 | 426.0 | 425.6 | 425.1 | 424.9  | 425.1 |
| 162.5° | 433.7 | 433.2 | 432.7 | 432.2 | 431.7 | 431.3 | 431.0 | 430.6 | 430.3 | 430.1  | 430.3 |
| 165°   | 437.6 | 437.1 | 436.6 | 436.1 | 435.6 | 435.4 | 435.2 | 434.9 | 434.7 | 434.6  | 434.8 |
| 167.5° | 441.1 | 440.6 | 440.1 | 439.6 | 439.1 | 438.9 | 438.7 | 438.4 | 438.2 | 438.1  | 438.3 |
| 170°   | 443.7 | 443.2 | 442.7 | 442.2 | 441.7 | 441.5 | 441.4 | 441.2 | 441.1 | 441.0  | 441.2 |
| 172.5° | 445.6 | 445.1 | 444.6 | 444.1 | 443.6 | 443.5 | 443.3 | 443.2 | 443.1 | 443.0  | 443.2 |
| 175°   | 446.9 | 446.4 | 445.9 | 445.4 | 444.9 | 444.8 | 444.6 | 444.5 | 444.4 | 444.3  | 444.5 |
| 177.5° | 447.2 | 446.7 | 446.2 | 445.7 | 445.2 | 445.1 | 445.1 | 445.0 | 444.9 | 444.9  | 445.2 |
| 180°   | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6  | 445.6 |

TEST NUMBER: P999511

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**CANDELA DISTRIBUTION (continued):**

|        | 345°  | 350°  | 355°  | 360°  |
|--------|-------|-------|-------|-------|
| 0°     | 630.7 | 630.7 | 630.7 | 630.7 |
| 2.5°   | 619.3 | 618.0 | 625.9 | 634.7 |
| 5°     | 606.6 | 608.8 | 618.9 | 631.2 |
| 7.5°   | 593.5 | 598.3 | 610.1 | 626.4 |
| 10°    | 575.1 | 583.8 | 601.8 | 618.5 |
| 12.5°  | 557.1 | 568.9 | 586.0 | 605.8 |
| 15°    | 536.9 | 550.1 | 571.1 | 594.8 |
| 17.5°  | 514.6 | 529.5 | 554.0 | 579.9 |
| 20°    | 490.9 | 510.6 | 536.5 | 564.6 |
| 22.5°  | 464.6 | 488.3 | 515.0 | 546.1 |
| 25°    | 439.2 | 465.1 | 491.8 | 527.7 |
| 27.5°  | 414.2 | 439.6 | 469.4 | 505.8 |
| 30°    | 389.2 | 412.5 | 444.5 | 483.5 |
| 32.5°  | 362.5 | 386.6 | 420.3 | 460.2 |
| 35°    | 337.9 | 362.1 | 393.6 | 433.1 |
| 37.5°  | 311.6 | 337.5 | 367.8 | 408.5 |
| 40°    | 281.0 | 311.2 | 340.6 | 379.6 |
| 42.5°  | 255.5 | 287.5 | 316.0 | 352.8 |
| 45°    | 235.4 | 265.6 | 289.3 | 325.2 |
| 47.5°  | 216.5 | 241.1 | 265.2 | 298.5 |
| 50°    | 198.6 | 217.4 | 242.4 | 272.2 |
| 52.5°  | 180.1 | 196.4 | 217.8 | 245.9 |
| 55°    | 163.5 | 178.8 | 198.1 | 219.6 |
| 57.5°  | 148.2 | 159.1 | 178.4 | 197.7 |
| 60°    | 131.1 | 142.5 | 157.4 | 173.6 |
| 62.5°  | 116.6 | 125.4 | 139.4 | 153.0 |
| 65°    | 101.3 | 109.6 | 120.1 | 132.8 |
| 67.5°  | 87.2  | 94.7  | 103.0 | 113.1 |
| 70°    | 74.5  | 80.2  | 86.3  | 95.1  |
| 72.5°  | 60.9  | 67.1  | 72.8  | 79.8  |
| 75°    | 50.0  | 52.6  | 57.4  | 62.2  |
| 77.5°  | 38.6  | 42.1  | 44.7  | 48.7  |
| 80°    | 27.6  | 30.7  | 31.6  | 34.6  |
| 82.5°  | 18.4  | 20.2  | 21.9  | 22.8  |
| 85°    | 10.5  | 11.4  | 13.1  | 13.6  |
| 87.5°  | 3.9   | 4.4   | 5.3   | 6.1   |
| 90°    | 2.7   | 1.9   | 1.1   | 0.3   |
| 92.5°  | 7.2   | 7.5   | 7.8   | 8.1   |
| 95°    | 13.9  | 16.2  | 18.6  | 21.0  |
| 97.5°  | 20.1  | 26.0  | 31.8  | 37.7  |
| 100°   | 27.6  | 37.5  | 47.3  | 57.1  |
| 102.5° | 77.9  | 78.0  | 78.2  | 78.3  |
| 105°   | 104.5 | 102.3 | 100.2 | 98.0  |
| 107.5° | 126.3 | 124.5 | 122.7 | 120.9 |
| 110°   | 147.3 | 145.8 | 144.3 | 142.8 |

TEST NUMBER: P999511

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_2700K

**CANDELA DISTRIBUTION (continued):**

|        | 345°  | 350°  | 355°  | 360°  |
|--------|-------|-------|-------|-------|
| 112.5° | 167.4 | 166.1 | 164.8 | 163.5 |
| 115°   | 189.1 | 187.8 | 186.6 | 185.4 |
| 117.5° | 208.7 | 207.2 | 205.8 | 204.4 |
| 120°   | 228.9 | 227.8 | 226.8 | 225.7 |
| 122.5° | 247.2 | 246.0 | 244.9 | 243.7 |
| 125°   | 264.9 | 264.0 | 263.0 | 262.1 |
| 127.5° | 281.9 | 280.9 | 279.9 | 278.9 |
| 130°   | 298.1 | 297.0 | 295.8 | 294.7 |
| 132.5° | 313.6 | 312.7 | 311.7 | 310.8 |
| 135°   | 327.8 | 326.6 | 325.5 | 324.3 |
| 137.5° | 341.1 | 340.2 | 339.4 | 338.5 |
| 140°   | 354.1 | 353.6 | 353.0 | 352.4 |
| 142.5° | 365.5 | 365.0 | 364.5 | 364.0 |
| 145°   | 376.0 | 376.1 | 376.1 | 376.2 |
| 147.5° | 386.2 | 386.5 | 386.7 | 386.9 |
| 150°   | 395.7 | 396.2 | 396.7 | 397.2 |
| 152.5° | 404.2 | 404.7 | 405.3 | 405.9 |
| 155°   | 412.4 | 413.0 | 413.7 | 414.3 |
| 157.5° | 419.4 | 419.9 | 420.5 | 421.1 |
| 160°   | 425.6 | 426.0 | 426.5 | 426.9 |
| 162.5° | 430.7 | 431.2 | 431.6 | 432.0 |
| 165°   | 435.2 | 435.7 | 436.1 | 436.5 |
| 167.5° | 438.8 | 439.2 | 439.7 | 440.1 |
| 170°   | 441.7 | 442.1 | 442.6 | 443.0 |
| 172.5° | 443.6 | 444.1 | 444.5 | 444.9 |
| 175°   | 445.0 | 445.5 | 446.0 | 446.5 |
| 177.5° | 445.7 | 446.2 | 446.7 | 447.2 |
| 180°   | 445.6 | 445.6 | 445.6 | 445.6 |

(END OF REPORT)