

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: P999515

Luminaire Tested: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

Issue Date: 5/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P999515  
REPORT IS A COMBINATION OF REPORTS P988068 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K  
Description: Define 2 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}  
{m-EER=1.115}  
Light Source: -  
Ballast/Driver: -

**Summary**

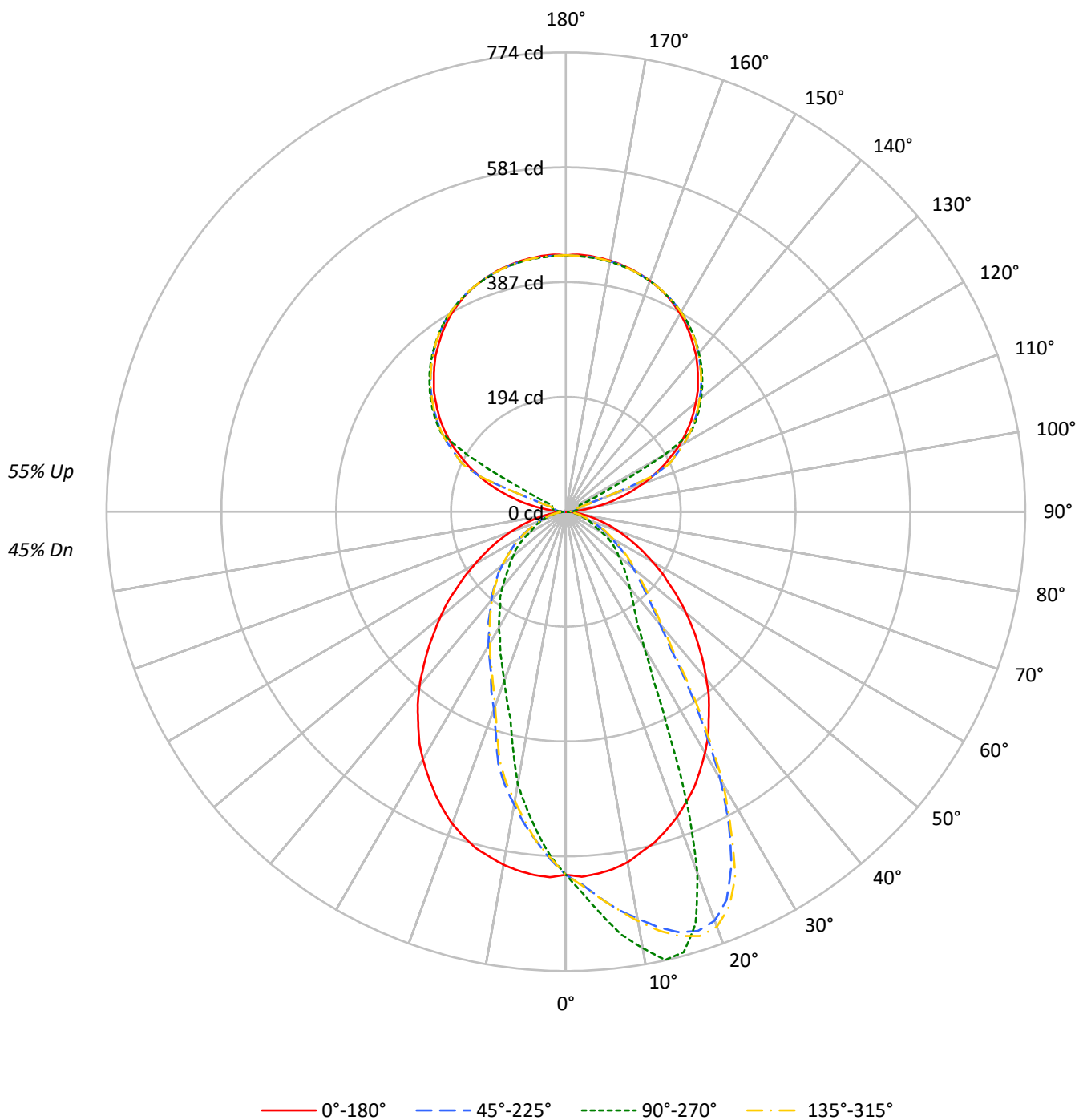
Lumens per Lamp: N/A  
Luminaire Lumens: 2325.0 lumens  
Efficiency: N/A  
Efficacy: 104.3 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 22.3  
Input Voltage (V):  
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: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

### Luminous Intensity Polar Plot



TEST NUMBER: P999515

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

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20 |    |    |    |    | 20 |    |    |    |    | 20 |    |    |    |    | 20 |
| RC  | 80  |     |     |     | 70 |    |    |    |    | 50 |    |    |    |    | 30 |    |    |    |    | 0  |
| 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 | 45 | 45 | 45 |
| 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°  | 9681 | 9681  | 9681 | 9681 |
| 5°  | 9705 | 10284 | 9738 | 8215 |
| 10° | 9597 | 10870 | 9666 | 6785 |
| 15° | 9390 | 10874 | 9549 | 5096 |
| 20° | 9140 | 8988  | 9338 | 4205 |
| 25° | 8836 | 5615  | 9026 | 3577 |
| 30° | 8447 | 3595  | 8677 | 3080 |
| 35° | 7975 | 2763  | 8235 | 2635 |
| 40° | 7450 | 2323  | 7768 | 2305 |
| 45° | 6888 | 1978  | 7177 | 1935 |
| 50° | 6313 | 1679  | 6607 | 1674 |
| 55° | 5673 | 1459  | 5979 | 1441 |
| 60° | 5107 | 1113  | 5377 | 1099 |
| 65° | 4579 | 838   | 4849 | 951  |
| 70° | 3993 | 669   | 4309 | 775  |
| 75° | 3379 | 513   | 3686 | 586  |
| 80° | 2683 | 349   | 2882 | 385  |
| 85° | 1865 | 181   | 2048 | 190  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 165°

Vertical Angle: 45°

Luminance: 8856 cd/sqm

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 58.0   | 2.5       |
| 10°-20°   | 161.9  | 7.0       |
| 20°-30°   | 208.4  | 9.0       |
| 30°-40°   | 197.7  | 8.5       |
| 40°-50°   | 169.5  | 7.3       |
| 50°-60°   | 129.0  | 5.6       |
| 60°-70°   | 81.4   | 3.5       |
| 70°-80°   | 40.6   | 1.7       |
| 80°-90°   | 11.2   | 0.5       |
| 90°-100°  | 14.3   | 0.6       |
| 100°-110° | 53.1   | 2.3       |
| 110°-120° | 140.9  | 6.1       |
| 120°-130° | 233.7  | 10.1      |
| 130°-140° | 248.3  | 10.7      |
| 140°-150° | 230.7  | 9.9       |
| 150°-160° | 185.5  | 8.0       |
| 160°-170° | 119.5  | 5.1       |
| 170°-180° | 41.1   | 1.8       |
| 0°-30°    | 428.4  | 18.4      |
| 0°-40°    | 626.1  | 26.9      |
| 0°-60°    | 924.6  | 39.8      |
| 0°-90°    | 1057.8 | 45.5      |
| 90°-120°  | 208.3  | 9.0       |
| 90°-150°  | 921.1  | 39.6      |
| 90°-180°  | 1267.0 | 54.5      |
| 0°-180°   | 2325.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 90° | 180° | 270° | 360° | Flux |
|------|-----|-----|------|------|------|------|
| 0°   | 612 | 612 | 612  | 612  | 612  |      |
| 5°   | 612 | 680 | 614  | 544  | 612  | 58   |
| 15°  | 577 | 768 | 587  | 360  | 577  | 162  |
| 25°  | 512 | 410 | 523  | 261  | 512  | 235  |
| 35°  | 420 | 202 | 434  | 192  | 420  | 263  |
| 45°  | 315 | 140 | 329  | 137  | 315  | 243  |
| 55°  | 213 | 97  | 224  | 96   | 213  | 192  |
| 65°  | 129 | 51  | 136  | 57   | 129  | 128  |
| 75°  | 60  | 27  | 66   | 31   | 60   | 65   |
| 85°  | 13  | 8   | 14   | 8    | 13   | 15   |
| 90°  | 0   | 8   | 0    | 8    | 0    | 2    |
| 95°  | 20  | 13  | 20   | 13   | 20   | 24   |
| 105° | 95  | 24  | 95   | 24   | 95   | 102  |
| 115° | 180 | 26  | 180  | 26   | 180  | 177  |
| 125° | 254 | 267 | 254  | 267  | 254  | 227  |
| 135° | 315 | 325 | 315  | 325  | 315  | 243  |
| 145° | 365 | 371 | 365  | 371  | 365  | 228  |
| 155° | 402 | 402 | 402  | 402  | 402  | 185  |
| 165° | 424 | 423 | 424  | 423  | 424  | 120  |
| 175° | 433 | 431 | 433  | 431  | 433  | 41   |
| 180° | 432 | 432 | 432  | 432  | 432  |      |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 22.5° | 25°   | 30°   | 35°   | 40°   | 45°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 |
| 2.5°   | 615.5 | 618.0 | 619.3 | 621.0 | 624.8 | 627.4 | 631.2 | 632.0 | 631.6 | 633.3 | 628.6 |
| 5°     | 612.1 | 617.6 | 622.7 | 626.9 | 633.7 | 638.0 | 642.7 | 648.2 | 649.5 | 655.9 | 652.0 |
| 7.5°   | 607.4 | 615.5 | 622.7 | 631.2 | 641.4 | 646.9 | 654.2 | 662.7 | 666.5 | 674.1 | 676.3 |
| 10°    | 599.7 | 611.2 | 623.5 | 632.5 | 646.5 | 656.3 | 663.1 | 676.7 | 685.6 | 697.1 | 695.4 |
| 12.5°  | 587.4 | 602.3 | 618.9 | 633.7 | 652.0 | 658.4 | 671.2 | 685.2 | 696.7 | 707.3 | 716.6 |
| 15°    | 576.8 | 593.8 | 612.1 | 630.3 | 651.2 | 663.1 | 675.8 | 694.1 | 706.4 | 725.1 | 733.2 |
| 17.5°  | 562.3 | 584.0 | 605.7 | 626.1 | 650.8 | 664.4 | 680.1 | 697.9 | 716.2 | 734.1 | 740.4 |
| 20°    | 547.5 | 570.8 | 594.2 | 621.8 | 649.9 | 663.1 | 679.2 | 701.3 | 719.2 | 733.2 | 733.2 |
| 22.5°  | 529.6 | 558.1 | 584.9 | 611.2 | 641.8 | 661.0 | 677.5 | 703.5 | 716.2 | 719.2 | 707.7 |
| 25°    | 511.8 | 540.2 | 569.6 | 602.3 | 637.1 | 654.2 | 672.9 | 697.1 | 701.3 | 689.4 | 659.7 |
| 27.5°  | 490.5 | 522.4 | 555.5 | 590.8 | 627.4 | 648.6 | 665.6 | 681.8 | 673.7 | 641.8 | 595.5 |
| 30°    | 468.8 | 503.3 | 540.7 | 574.2 | 618.4 | 638.0 | 652.5 | 657.1 | 631.6 | 579.8 | 519.8 |
| 32.5°  | 446.3 | 479.9 | 519.4 | 559.8 | 604.4 | 623.1 | 632.5 | 620.1 | 573.4 | 507.9 | 434.8 |
| 35°    | 419.9 | 457.8 | 499.0 | 541.1 | 585.3 | 599.3 | 604.8 | 574.7 | 514.7 | 430.1 | 357.5 |
| 37.5°  | 396.1 | 434.0 | 478.2 | 521.1 | 564.0 | 571.7 | 566.2 | 519.0 | 442.9 | 359.2 | 288.2 |
| 40°    | 368.1 | 408.5 | 451.8 | 499.9 | 535.1 | 537.3 | 523.7 | 462.5 | 368.1 | 289.5 | 245.7 |
| 42.5°  | 342.2 | 383.0 | 426.3 | 475.2 | 502.0 | 494.8 | 476.5 | 396.1 | 307.3 | 249.5 | 214.2 |
| 45°    | 315.4 | 354.1 | 400.8 | 444.2 | 463.3 | 446.3 | 418.7 | 333.2 | 258.0 | 214.6 | 187.4 |
| 47.5°  | 289.5 | 325.6 | 371.9 | 413.6 | 417.0 | 397.8 | 365.1 | 279.3 | 223.6 | 188.7 | 166.6 |
| 50°    | 264.0 | 300.1 | 343.4 | 377.9 | 374.5 | 348.1 | 311.1 | 242.7 | 194.2 | 166.6 | 148.3 |
| 52.5°  | 238.5 | 271.2 | 313.3 | 340.5 | 326.0 | 300.5 | 264.0 | 205.7 | 169.6 | 145.4 | 131.3 |
| 55°    | 212.9 | 243.6 | 279.7 | 302.2 | 279.3 | 249.9 | 224.0 | 176.4 | 147.1 | 127.5 | 116.9 |
| 57.5°  | 191.7 | 215.9 | 249.1 | 262.7 | 235.1 | 212.1 | 189.6 | 151.7 | 127.5 | 113.5 | 101.2 |
| 60°    | 168.3 | 190.4 | 217.6 | 225.7 | 197.2 | 178.5 | 159.4 | 128.4 | 109.2 | 96.9  | 88.8  |
| 62.5°  | 148.3 | 166.6 | 187.4 | 187.4 | 162.4 | 148.3 | 133.9 | 107.5 | 91.8  | 82.0  | 78.2  |
| 65°    | 128.8 | 142.0 | 156.8 | 155.1 | 133.9 | 121.6 | 110.1 | 88.8  | 76.9  | 70.1  | 66.3  |
| 67.5°  | 109.7 | 119.9 | 129.6 | 123.7 | 108.4 | 97.8  | 87.1  | 71.8  | 63.8  | 59.1  | 54.0  |
| 70°    | 92.2  | 100.3 | 105.4 | 99.9  | 84.6  | 75.7  | 68.0  | 57.8  | 51.4  | 45.5  | 42.5  |
| 72.5°  | 77.4  | 80.8  | 82.5  | 75.7  | 62.9  | 57.8  | 52.3  | 45.1  | 39.5  | 36.6  | 35.7  |
| 75°    | 60.4  | 63.3  | 62.1  | 57.0  | 46.3  | 42.5  | 38.3  | 33.2  | 31.9  | 30.2  | 29.3  |
| 77.5°  | 47.2  | 47.2  | 45.1  | 40.4  | 33.2  | 30.2  | 28.5  | 25.9  | 24.7  | 24.2  | 23.4  |
| 80°    | 33.6  | 33.2  | 31.9  | 26.8  | 22.5  | 20.8  | 20.8  | 19.1  | 18.7  | 17.9  | 17.9  |
| 82.5°  | 22.1  | 22.1  | 20.4  | 16.2  | 14.9  | 14.5  | 14.0  | 13.2  | 13.2  | 12.8  | 12.8  |
| 85°    | 13.2  | 12.3  | 10.2  | 8.9   | 8.5   | 8.5   | 8.1   | 7.7   | 8.1   | 7.7   | 7.7   |
| 87.5°  | 6.0   | 4.7   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   |
| 90°    | 0.3   | 1.1   | 1.9   | 2.6   | 3.4   | 3.8   | 4.1   | 4.6   | 5.2   | 5.7   | 6.3   |
| 92.5°  | 7.8   | 7.5   | 7.3   | 7.0   | 6.7   | 6.6   | 6.7   | 6.9   | 7.1   | 7.3   | 7.5   |
| 95°    | 20.3  | 18.0  | 15.7  | 13.4  | 11.1  | 10.0  | 10.2  | 10.7  | 11.2  | 11.7  | 12.2  |
| 97.5°  | 36.6  | 30.9  | 25.2  | 19.5  | 13.8  | 10.9  | 11.5  | 12.6  | 13.7  | 14.9  | 16.0  |
| 100°   | 55.4  | 45.9  | 36.3  | 26.8  | 17.3  | 12.5  | 13.1  | 14.3  | 15.4  | 16.6  | 17.8  |
| 102.5° | 76.0  | 75.9  | 75.7  | 75.6  | 75.5  | 75.4  | 69.1  | 56.4  | 43.8  | 31.1  | 18.5  |
| 105°   | 95.1  | 97.2  | 99.3  | 101.4 | 103.5 | 104.5 | 95.0  | 76.0  | 57.1  | 38.1  | 19.1  |
| 107.5° | 117.3 | 119.0 | 120.8 | 122.5 | 124.2 | 125.1 | 113.4 | 90.0  | 66.5  | 43.1  | 19.7  |
| 110°   | 138.6 | 140.0 | 141.5 | 142.9 | 144.4 | 145.1 | 135.1 | 115.0 | 94.9  | 74.8  | 54.7  |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 22.5° | 25°   | 30°   | 35°   | 40°   | 45°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 158.6 | 159.8 | 161.1 | 162.3 | 163.6 | 164.2 | 163.6 | 162.4 | 161.3 | 160.1 | 158.9 |
| 115°   | 179.8 | 181.0 | 182.2 | 183.4 | 184.6 | 185.2 | 186.1 | 187.8 | 189.5 | 191.3 | 193.0 |
| 117.5° | 198.3 | 199.7 | 201.1 | 202.5 | 203.9 | 204.6 | 205.2 | 206.4 | 207.5 | 208.7 | 209.9 |
| 120°   | 218.9 | 219.9 | 221.0 | 222.0 | 223.1 | 223.6 | 224.2 | 225.5 | 226.8 | 228.0 | 229.3 |
| 122.5° | 236.5 | 237.6 | 238.7 | 239.8 | 240.9 | 241.5 | 242.2 | 243.6 | 244.9 | 246.3 | 247.7 |
| 125°   | 254.3 | 255.2 | 256.1 | 257.0 | 257.9 | 258.4 | 259.1 | 260.4 | 261.7 | 263.0 | 264.3 |
| 127.5° | 270.6 | 271.6 | 272.5 | 273.5 | 274.4 | 274.9 | 275.4 | 276.5 | 277.5 | 278.6 | 279.6 |
| 130°   | 285.9 | 287.0 | 288.1 | 289.2 | 290.3 | 290.9 | 291.3 | 292.0 | 292.8 | 293.5 | 294.3 |
| 132.5° | 301.5 | 302.4 | 303.3 | 304.2 | 305.1 | 305.6 | 306.0 | 306.7 | 307.5 | 308.2 | 309.0 |
| 135°   | 314.7 | 315.8 | 316.9 | 318.0 | 319.1 | 319.7 | 320.0 | 320.6 | 321.3 | 321.9 | 322.5 |
| 137.5° | 328.4 | 329.2 | 330.1 | 330.9 | 331.8 | 332.2 | 332.5 | 333.2 | 333.9 | 334.6 | 335.3 |
| 140°   | 341.9 | 342.5 | 343.0 | 343.6 | 344.1 | 344.4 | 344.8 | 345.5 | 346.3 | 347.0 | 347.8 |
| 142.5° | 353.1 | 353.6 | 354.1 | 354.6 | 355.1 | 355.3 | 355.8 | 356.7 | 357.6 | 358.5 | 359.4 |
| 145°   | 365.0 | 364.9 | 364.9 | 364.8 | 364.7 | 364.7 | 365.3 | 366.5 | 367.6 | 368.8 | 370.0 |
| 147.5° | 375.3 | 375.1 | 374.9 | 374.7 | 374.5 | 374.4 | 375.0 | 376.2 | 377.3 | 378.5 | 379.7 |
| 150°   | 385.3 | 384.8 | 384.4 | 383.9 | 383.4 | 383.2 | 383.8 | 384.9 | 386.0 | 387.1 | 388.2 |
| 152.5° | 393.8 | 393.2 | 392.7 | 392.1 | 391.6 | 391.3 | 391.8 | 392.9 | 393.9 | 395.0 | 396.0 |
| 155°   | 401.9 | 401.3 | 400.7 | 400.0 | 399.4 | 399.1 | 399.5 | 400.4 | 401.2 | 402.1 | 402.9 |
| 157.5° | 408.5 | 407.9 | 407.4 | 406.8 | 406.3 | 406.0 | 406.3 | 406.9 | 407.6 | 408.2 | 408.8 |
| 160°   | 414.1 | 413.7 | 413.3 | 412.8 | 412.4 | 412.2 | 412.4 | 412.8 | 413.3 | 413.7 | 414.1 |
| 162.5° | 419.1 | 418.7 | 418.3 | 417.8 | 417.4 | 417.2 | 417.4 | 417.7 | 418.1 | 418.4 | 418.8 |
| 165°   | 423.5 | 423.1 | 422.7 | 422.2 | 421.8 | 421.6 | 421.7 | 421.9 | 422.2 | 422.4 | 422.6 |
| 167.5° | 426.9 | 426.5 | 426.1 | 425.7 | 425.3 | 425.1 | 425.2 | 425.4 | 425.6 | 425.8 | 426.0 |
| 170°   | 429.8 | 429.4 | 429.0 | 428.5 | 428.1 | 427.9 | 428.0 | 428.1 | 428.2 | 428.4 | 428.5 |
| 172.5° | 431.6 | 431.2 | 430.8 | 430.4 | 430.0 | 429.8 | 429.9 | 430.0 | 430.1 | 430.3 | 430.4 |
| 175°   | 433.2 | 432.7 | 432.2 | 431.7 | 431.2 | 431.0 | 431.1 | 431.2 | 431.3 | 431.5 | 431.6 |
| 177.5° | 433.8 | 433.3 | 432.8 | 432.3 | 431.8 | 431.6 | 431.6 | 431.7 | 431.8 | 431.8 | 431.9 |
| 180°   | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 50°   | 55°   | 60°   | 65°   | 67.5° | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 |
| 2.5°   | 633.3 | 634.2 | 635.4 | 641.4 | 642.2 | 643.9 | 643.1 | 643.1 | 643.5 | 642.7 | 643.1 |
| 5°     | 660.5 | 661.8 | 668.2 | 675.4 | 677.1 | 675.4 | 677.5 | 680.5 | 680.5 | 680.5 | 679.7 |
| 7.5°   | 686.0 | 690.7 | 697.9 | 708.6 | 710.7 | 712.8 | 716.6 | 714.1 | 714.9 | 718.8 | 717.5 |
| 10°    | 710.7 | 717.5 | 725.6 | 734.5 | 739.2 | 742.1 | 743.8 | 747.7 | 756.6 | 746.4 | 750.2 |
| 12.5°  | 734.1 | 743.8 | 752.3 | 762.1 | 765.5 | 769.3 | 770.6 | 774.0 | 774.0 | 773.6 | 776.6 |
| 15°    | 749.4 | 758.3 | 765.9 | 772.3 | 773.2 | 772.3 | 771.5 | 771.9 | 773.2 | 768.1 | 771.0 |
| 17.5°  | 752.8 | 753.6 | 756.2 | 753.6 | 754.0 | 745.1 | 740.0 | 738.7 | 726.8 | 727.3 | 737.0 |
| 20°    | 736.2 | 721.7 | 717.9 | 703.9 | 695.4 | 672.4 | 671.6 | 665.2 | 640.1 | 647.8 | 646.1 |
| 22.5°  | 690.7 | 666.1 | 633.3 | 617.2 | 609.1 | 584.9 | 566.2 | 553.0 | 544.1 | 535.1 | 531.3 |
| 25°    | 630.8 | 590.8 | 544.5 | 512.6 | 507.9 | 485.4 | 451.0 | 434.8 | 415.7 | 409.7 | 419.9 |
| 27.5°  | 553.4 | 501.6 | 449.3 | 400.4 | 391.5 | 371.1 | 353.6 | 342.2 | 320.1 | 318.8 | 319.6 |
| 30°    | 448.4 | 396.1 | 352.4 | 320.5 | 298.4 | 289.0 | 277.6 | 269.1 | 260.1 | 263.5 | 264.4 |
| 32.5°  | 368.5 | 318.8 | 278.0 | 261.0 | 250.8 | 244.8 | 235.1 | 229.5 | 225.7 | 224.4 | 224.0 |
| 35°    | 292.9 | 259.7 | 241.4 | 224.9 | 218.9 | 214.6 | 207.4 | 204.9 | 201.5 | 201.9 | 201.9 |
| 37.5°  | 250.8 | 223.2 | 209.5 | 201.0 | 195.5 | 193.4 | 188.7 | 186.2 | 184.0 | 183.2 | 184.5 |
| 40°    | 216.4 | 197.2 | 188.7 | 181.1 | 176.4 | 175.5 | 173.0 | 170.0 | 167.5 | 167.9 | 169.2 |
| 42.5°  | 191.3 | 180.2 | 170.0 | 164.1 | 160.7 | 159.4 | 157.3 | 155.1 | 155.1 | 153.9 | 153.4 |
| 45°    | 171.3 | 162.4 | 153.9 | 148.3 | 146.2 | 144.5 | 142.0 | 141.5 | 139.8 | 140.3 | 140.7 |
| 47.5°  | 153.4 | 146.2 | 139.8 | 134.3 | 132.2 | 131.8 | 129.2 | 127.5 | 127.5 | 127.1 | 126.7 |
| 50°    | 137.3 | 130.1 | 124.5 | 121.6 | 118.6 | 117.7 | 117.3 | 116.9 | 116.0 | 116.0 | 116.5 |
| 52.5°  | 124.1 | 116.9 | 112.6 | 110.1 | 108.4 | 107.5 | 107.5 | 107.1 | 107.1 | 107.1 | 106.7 |
| 55°    | 109.7 | 103.7 | 100.3 | 99.5  | 98.6  | 98.2  | 97.8  | 96.9  | 96.5  | 97.3  | 96.5  |
| 57.5°  | 96.1  | 93.9  | 91.0  | 90.1  | 88.0  | 88.0  | 86.7  | 85.9  | 85.0  | 85.9  | 85.9  |
| 60°    | 85.4  | 82.5  | 80.8  | 78.2  | 76.5  | 74.8  | 72.7  | 72.3  | 71.4  | 71.0  | 70.6  |
| 62.5°  | 74.4  | 71.8  | 67.6  | 63.8  | 61.2  | 59.5  | 58.7  | 58.2  | 58.2  | 57.8  | 57.8  |
| 65°    | 62.1  | 56.1  | 54.0  | 52.7  | 52.3  | 51.9  | 51.0  | 50.6  | 51.0  | 50.6  | 51.0  |
| 67.5°  | 48.5  | 47.6  | 46.3  | 45.5  | 45.1  | 44.6  | 44.6  | 44.2  | 44.2  | 44.2  | 44.2  |
| 70°    | 42.1  | 40.0  | 39.5  | 38.7  | 38.7  | 38.3  | 38.3  | 38.3  | 38.3  | 37.8  | 38.7  |
| 72.5°  | 34.9  | 33.6  | 33.2  | 32.7  | 32.7  | 32.7  | 32.3  | 32.3  | 32.3  | 31.9  | 32.3  |
| 75°    | 28.5  | 28.1  | 27.2  | 27.2  | 26.8  | 27.2  | 26.8  | 26.8  | 26.4  | 26.8  | 26.8  |
| 77.5°  | 23.0  | 22.5  | 22.1  | 22.1  | 21.7  | 21.7  | 21.7  | 21.7  | 21.7  | 21.7  | 22.1  |
| 80°    | 17.4  | 17.0  | 16.6  | 17.0  | 16.6  | 17.0  | 16.6  | 16.6  | 17.0  | 16.6  | 16.6  |
| 82.5°  | 12.8  | 12.3  | 12.3  | 11.9  | 11.9  | 11.9  | 11.9  | 11.9  | 11.9  | 11.9  | 11.9  |
| 85°    | 7.7   | 7.2   | 7.2   | 7.7   | 7.2   | 7.7   | 7.2   | 7.2   | 7.2   | 7.7   | 7.7   |
| 87.5°  | 3.4   | 3.8   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.4   | 3.8   |
| 90°    | 6.6   | 7.0   | 7.3   | 7.6   | 7.8   | 7.9   | 8.0   | 8.1   | 8.3   | 8.4   | 8.3   |
| 92.5°  | 7.6   | 7.8   | 7.9   | 8.0   | 8.1   | 8.1   | 8.2   | 8.3   | 8.3   | 8.4   | 8.3   |
| 95°    | 12.6  | 12.9  | 13.3  | 13.6  | 13.8  | 13.8  | 13.7  | 13.6  | 13.5  | 13.4  | 13.5  |
| 97.5°  | 16.2  | 16.4  | 16.6  | 16.8  | 16.9  | 16.9  | 17.0  | 17.1  | 17.1  | 17.2  | 17.1  |
| 100°   | 18.4  | 18.9  | 19.5  | 20.0  | 20.3  | 20.4  | 20.5  | 20.7  | 20.8  | 21.0  | 20.8  |
| 102.5° | 19.3  | 20.0  | 20.8  | 21.5  | 21.9  | 22.0  | 22.2  | 22.4  | 22.6  | 22.8  | 22.6  |
| 105°   | 19.9  | 20.6  | 21.4  | 22.1  | 22.5  | 22.6  | 22.9  | 23.2  | 23.5  | 23.8  | 23.5  |
| 107.5° | 20.5  | 21.2  | 22.0  | 22.7  | 23.1  | 23.2  | 23.5  | 23.8  | 24.1  | 24.4  | 24.1  |
| 110°   | 47.8  | 40.8  | 33.9  | 27.0  | 23.5  | 23.6  | 23.9  | 24.2  | 24.4  | 24.7  | 24.4  |





TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 50°   | 55°   | 60°   | 65°   | 67.5° | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 128.9 | 99.0  | 69.0  | 39.1  | 24.1  | 24.2  | 24.4  | 24.6  | 24.8  | 25.0  | 24.8  |
| 115°   | 160.8 | 128.6 | 96.5  | 64.3  | 48.2  | 45.7  | 40.7  | 35.6  | 30.6  | 25.6  | 30.6  |
| 117.5° | 199.9 | 190.0 | 180.0 | 170.1 | 165.1 | 156.0 | 137.8 | 119.6 | 101.4 | 83.2  | 101.4 |
| 120°   | 230.1 | 230.9 | 231.8 | 232.6 | 233.0 | 228.3 | 218.9 | 209.6 | 200.2 | 190.8 | 200.2 |
| 122.5° | 248.1 | 248.5 | 249.0 | 249.4 | 249.6 | 249.6 | 249.7 | 249.8 | 249.8 | 249.9 | 249.8 |
| 125°   | 264.8 | 265.3 | 265.8 | 266.3 | 266.5 | 266.6 | 266.8 | 267.0 | 267.2 | 267.4 | 267.2 |
| 127.5° | 280.3 | 281.0 | 281.7 | 282.4 | 282.8 | 282.8 | 282.9 | 283.0 | 283.0 | 283.1 | 283.0 |
| 130°   | 295.1 | 295.9 | 296.6 | 297.4 | 297.8 | 297.8 | 297.7 | 297.6 | 297.6 | 297.5 | 297.6 |
| 132.5° | 309.6 | 310.2 | 310.9 | 311.5 | 311.8 | 311.8 | 311.7 | 311.6 | 311.6 | 311.5 | 311.6 |
| 135°   | 323.2 | 323.9 | 324.6 | 325.3 | 325.6 | 325.5 | 325.4 | 325.3 | 325.1 | 325.0 | 325.1 |
| 137.5° | 336.0 | 336.7 | 337.4 | 338.1 | 338.4 | 338.3 | 338.1 | 337.9 | 337.7 | 337.5 | 337.7 |
| 140°   | 348.4 | 349.0 | 349.7 | 350.3 | 350.6 | 350.4 | 350.1 | 349.8 | 349.4 | 349.1 | 349.4 |
| 142.5° | 360.0 | 360.5 | 361.1 | 361.6 | 361.9 | 361.7 | 361.4 | 361.0 | 360.7 | 360.3 | 360.7 |
| 145°   | 370.5 | 371.0 | 371.5 | 372.0 | 372.2 | 372.0 | 371.7 | 371.3 | 371.0 | 370.6 | 371.0 |
| 147.5° | 380.1 | 380.4 | 380.8 | 381.1 | 381.3 | 381.2 | 380.9 | 380.6 | 380.3 | 380.0 | 380.3 |
| 150°   | 388.6 | 389.0 | 389.4 | 389.8 | 390.0 | 389.8 | 389.5 | 389.2 | 388.8 | 388.5 | 388.8 |
| 152.5° | 396.4 | 396.8 | 397.3 | 397.7 | 397.9 | 397.7 | 397.2 | 396.7 | 396.2 | 395.7 | 396.2 |
| 155°   | 403.3 | 403.7 | 404.1 | 404.5 | 404.7 | 404.4 | 403.9 | 403.3 | 402.8 | 402.2 | 402.8 |
| 157.5° | 409.3 | 409.8 | 410.3 | 410.8 | 411.0 | 410.7 | 410.2 | 409.6 | 409.1 | 408.5 | 409.1 |
| 160°   | 414.5 | 414.9 | 415.4 | 415.8 | 416.0 | 415.8 | 415.3 | 414.8 | 414.3 | 413.8 | 414.3 |
| 162.5° | 419.3 | 419.8 | 420.3 | 420.8 | 421.0 | 420.7 | 420.1 | 419.4 | 418.8 | 418.2 | 418.8 |
| 165°   | 423.1 | 423.6 | 424.1 | 424.6 | 424.8 | 424.6 | 424.1 | 423.6 | 423.1 | 422.6 | 423.1 |
| 167.5° | 426.5 | 427.0 | 427.5 | 428.0 | 428.2 | 427.9 | 427.3 | 426.6 | 426.0 | 425.4 | 426.0 |
| 170°   | 429.0 | 429.5 | 430.0 | 430.5 | 430.7 | 430.4 | 429.8 | 429.1 | 428.5 | 427.9 | 428.5 |
| 172.5° | 430.9 | 431.4 | 431.9 | 432.4 | 432.6 | 432.3 | 431.7 | 431.0 | 430.4 | 429.8 | 430.4 |
| 175°   | 432.1 | 432.6 | 433.1 | 433.6 | 433.8 | 433.5 | 432.8 | 432.1 | 431.4 | 430.7 | 431.4 |
| 177.5° | 432.4 | 432.9 | 433.4 | 433.9 | 434.1 | 433.8 | 433.2 | 432.5 | 431.9 | 431.3 | 431.9 |
| 180°   | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 100°  | 105°  | 110°  | 112.5° | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  |
|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 611.6 | 611.6 | 611.6 | 611.6  | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 |
| 2.5°   | 644.8 | 641.8 | 641.0 | 641.8  | 641.0 | 641.4 | 638.4 | 627.4 | 630.3 | 625.7 | 628.2 |
| 5°     | 681.4 | 678.8 | 673.3 | 672.4  | 671.6 | 670.7 | 666.5 | 656.7 | 652.9 | 646.5 | 646.1 |
| 7.5°   | 716.2 | 716.2 | 712.0 | 709.0  | 705.2 | 702.2 | 696.7 | 682.2 | 676.3 | 668.6 | 664.4 |
| 10°    | 750.6 | 739.6 | 744.3 | 741.3  | 731.9 | 730.2 | 720.0 | 711.5 | 700.1 | 692.4 | 685.6 |
| 12.5°  | 775.3 | 771.9 | 767.6 | 765.1  | 762.5 | 757.0 | 750.2 | 728.5 | 722.6 | 707.3 | 699.6 |
| 15°    | 774.4 | 772.3 | 773.6 | 773.6  | 772.7 | 771.5 | 765.9 | 750.2 | 740.0 | 725.1 | 712.0 |
| 17.5°  | 732.8 | 738.3 | 743.8 | 747.7  | 756.2 | 760.0 | 765.1 | 755.7 | 749.4 | 736.6 | 722.6 |
| 20°    | 660.1 | 673.7 | 689.9 | 693.3  | 700.9 | 723.4 | 733.6 | 741.7 | 744.3 | 740.0 | 728.5 |
| 22.5°  | 558.9 | 570.4 | 609.5 | 608.7  | 619.7 | 646.5 | 676.3 | 700.5 | 719.6 | 730.2 | 726.0 |
| 25°    | 437.8 | 454.0 | 474.8 | 490.5  | 526.6 | 566.6 | 603.6 | 642.2 | 675.4 | 704.7 | 712.0 |
| 27.5°  | 331.1 | 352.4 | 368.9 | 389.8  | 408.0 | 455.2 | 502.8 | 563.2 | 601.9 | 657.6 | 686.5 |
| 30°    | 267.8 | 277.6 | 294.1 | 303.9  | 312.8 | 349.0 | 402.9 | 462.5 | 530.5 | 594.6 | 644.4 |
| 32.5°  | 228.7 | 235.5 | 247.8 | 252.1  | 261.4 | 285.6 | 319.6 | 374.0 | 444.2 | 522.0 | 587.4 |
| 35°    | 205.3 | 212.5 | 215.1 | 218.9  | 226.6 | 241.9 | 265.2 | 304.8 | 368.1 | 444.2 | 522.4 |
| 37.5°  | 185.3 | 189.1 | 196.4 | 198.9  | 201.5 | 212.9 | 228.7 | 256.3 | 298.4 | 360.9 | 447.6 |
| 40°    | 171.3 | 173.4 | 177.2 | 179.4  | 181.1 | 189.1 | 203.2 | 221.9 | 252.9 | 300.5 | 380.4 |
| 42.5°  | 156.4 | 159.0 | 161.5 | 164.1  | 166.2 | 172.6 | 181.1 | 198.9 | 219.8 | 255.9 | 313.7 |
| 45°    | 142.0 | 143.7 | 146.6 | 148.3  | 151.3 | 156.4 | 164.1 | 176.4 | 195.1 | 218.1 | 264.8 |
| 47.5°  | 128.8 | 130.9 | 132.2 | 134.3  | 136.4 | 142.0 | 149.2 | 157.3 | 172.6 | 195.1 | 229.1 |
| 50°    | 116.9 | 119.4 | 121.1 | 121.6  | 123.3 | 128.4 | 134.3 | 143.2 | 153.0 | 170.4 | 200.2 |
| 52.5°  | 108.4 | 108.8 | 110.1 | 111.8  | 111.4 | 114.3 | 119.9 | 126.7 | 136.9 | 150.9 | 172.6 |
| 55°    | 98.6  | 99.9  | 100.7 | 101.2  | 101.2 | 103.7 | 106.7 | 113.1 | 121.1 | 132.6 | 150.9 |
| 57.5°  | 86.3  | 87.6  | 90.1  | 91.0   | 92.2  | 93.5  | 94.8  | 99.0  | 105.8 | 116.9 | 131.8 |
| 60°    | 73.5  | 74.4  | 76.9  | 78.6   | 79.5  | 82.9  | 84.6  | 88.0  | 91.8  | 99.9  | 113.9 |
| 62.5°  | 59.1  | 59.9  | 61.2  | 62.9   | 64.6  | 69.7  | 74.0  | 77.4  | 80.3  | 85.9  | 97.3  |
| 65°    | 51.4  | 51.9  | 52.7  | 53.1   | 53.6  | 55.7  | 59.5  | 64.2  | 69.7  | 74.0  | 80.8  |
| 67.5°  | 44.6  | 45.1  | 45.5  | 46.3   | 46.8  | 47.2  | 48.9  | 50.2  | 55.7  | 61.6  | 66.7  |
| 70°    | 38.3  | 39.1  | 39.5  | 39.5   | 40.0  | 40.8  | 41.7  | 43.4  | 45.1  | 48.0  | 54.4  |
| 72.5°  | 32.3  | 32.7  | 33.6  | 33.6   | 33.6  | 34.4  | 35.3  | 36.1  | 37.0  | 38.7  | 41.2  |
| 75°    | 26.8  | 27.6  | 27.6  | 27.6   | 28.1  | 28.1  | 28.9  | 29.8  | 30.6  | 31.9  | 32.7  |
| 77.5°  | 22.1  | 22.1  | 22.1  | 22.1   | 22.5  | 22.5  | 23.0  | 23.8  | 24.2  | 24.7  | 25.5  |
| 80°    | 16.6  | 17.0  | 17.0  | 17.0   | 17.4  | 17.4  | 17.4  | 18.3  | 18.7  | 18.7  | 19.6  |
| 82.5°  | 12.3  | 12.3  | 12.3  | 12.8   | 12.3  | 12.8  | 12.8  | 13.2  | 12.8  | 13.2  | 13.6  |
| 85°    | 7.7   | 7.7   | 7.7   | 8.1    | 8.1   | 8.1   | 8.1   | 8.1   | 8.1   | 8.1   | 8.5   |
| 87.5°  | 3.8   | 3.8   | 3.8   | 3.8    | 3.8   | 3.8   | 3.8   | 3.8   | 4.3   | 3.8   | 3.8   |
| 90°    | 8.1   | 8.0   | 7.9   | 7.8    | 7.6   | 7.3   | 7.0   | 6.6   | 6.3   | 5.7   | 5.2   |
| 92.5°  | 8.3   | 8.2   | 8.1   | 8.1    | 8.0   | 7.9   | 7.8   | 7.6   | 7.5   | 7.3   | 7.1   |
| 95°    | 13.6  | 13.7  | 13.8  | 13.8   | 13.6  | 13.3  | 12.9  | 12.6  | 12.2  | 11.7  | 11.2  |
| 97.5°  | 17.1  | 17.0  | 16.9  | 16.9   | 16.8  | 16.6  | 16.4  | 16.2  | 16.0  | 14.9  | 13.7  |
| 100°   | 20.7  | 20.5  | 20.4  | 20.3   | 20.0  | 19.5  | 18.9  | 18.4  | 17.8  | 16.6  | 15.4  |
| 102.5° | 22.4  | 22.2  | 22.0  | 21.9   | 21.5  | 20.8  | 20.0  | 19.3  | 18.5  | 31.1  | 43.8  |
| 105°   | 23.2  | 22.9  | 22.6  | 22.5   | 22.1  | 21.4  | 20.6  | 19.9  | 19.1  | 38.1  | 57.1  |
| 107.5° | 23.8  | 23.5  | 23.2  | 23.1   | 22.7  | 22.0  | 21.2  | 20.5  | 19.7  | 43.1  | 66.5  |
| 110°   | 24.2  | 23.9  | 23.6  | 23.5   | 27.0  | 33.9  | 40.8  | 47.8  | 54.7  | 74.8  | 94.9  |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 100°  | 105°  | 110°  | 112.5° | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  |
|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 24.6  | 24.4  | 24.2  | 24.1   | 39.1  | 69.0  | 99.0  | 128.9 | 158.9 | 160.1 | 161.3 |
| 115°   | 35.6  | 40.7  | 45.7  | 48.2   | 64.3  | 96.5  | 128.6 | 160.8 | 193.0 | 191.3 | 189.5 |
| 117.5° | 119.6 | 137.8 | 156.0 | 165.1  | 170.1 | 180.0 | 190.0 | 199.9 | 209.9 | 208.7 | 207.5 |
| 120°   | 209.6 | 218.9 | 228.3 | 233.0  | 232.6 | 231.8 | 230.9 | 230.1 | 229.3 | 228.0 | 226.8 |
| 122.5° | 249.8 | 249.7 | 249.6 | 249.6  | 249.4 | 249.0 | 248.5 | 248.1 | 247.7 | 246.3 | 244.9 |
| 125°   | 267.0 | 266.8 | 266.6 | 266.5  | 266.3 | 265.8 | 265.3 | 264.8 | 264.3 | 263.0 | 261.7 |
| 127.5° | 283.0 | 282.9 | 282.8 | 282.8  | 282.4 | 281.7 | 281.0 | 280.3 | 279.6 | 278.6 | 277.5 |
| 130°   | 297.6 | 297.7 | 297.8 | 297.8  | 297.4 | 296.6 | 295.9 | 295.1 | 294.3 | 293.5 | 292.8 |
| 132.5° | 311.6 | 311.7 | 311.8 | 311.8  | 311.5 | 310.9 | 310.2 | 309.6 | 309.0 | 308.2 | 307.5 |
| 135°   | 325.3 | 325.4 | 325.5 | 325.6  | 325.3 | 324.6 | 323.9 | 323.2 | 322.5 | 321.9 | 321.3 |
| 137.5° | 337.9 | 338.1 | 338.3 | 338.4  | 338.1 | 337.4 | 336.7 | 336.0 | 335.3 | 334.6 | 333.9 |
| 140°   | 349.8 | 350.1 | 350.4 | 350.6  | 350.3 | 349.7 | 349.0 | 348.4 | 347.8 | 347.0 | 346.3 |
| 142.5° | 361.0 | 361.4 | 361.7 | 361.9  | 361.6 | 361.1 | 360.5 | 360.0 | 359.4 | 358.5 | 357.6 |
| 145°   | 371.3 | 371.7 | 372.0 | 372.2  | 372.0 | 371.5 | 371.0 | 370.5 | 370.0 | 368.8 | 367.6 |
| 147.5° | 380.6 | 380.9 | 381.2 | 381.3  | 381.1 | 380.8 | 380.4 | 380.1 | 379.7 | 378.5 | 377.3 |
| 150°   | 389.2 | 389.5 | 389.8 | 390.0  | 389.8 | 389.4 | 389.0 | 388.6 | 388.2 | 387.1 | 386.0 |
| 152.5° | 396.7 | 397.2 | 397.7 | 397.9  | 397.7 | 397.3 | 396.8 | 396.4 | 396.0 | 395.0 | 393.9 |
| 155°   | 403.3 | 403.9 | 404.4 | 404.7  | 404.5 | 404.1 | 403.7 | 403.3 | 402.9 | 402.1 | 401.2 |
| 157.5° | 409.6 | 410.2 | 410.7 | 411.0  | 410.8 | 410.3 | 409.8 | 409.3 | 408.8 | 408.2 | 407.6 |
| 160°   | 414.8 | 415.3 | 415.8 | 416.0  | 415.8 | 415.4 | 414.9 | 414.5 | 414.1 | 413.7 | 413.3 |
| 162.5° | 419.4 | 420.1 | 420.7 | 421.0  | 420.8 | 420.3 | 419.8 | 419.3 | 418.8 | 418.4 | 418.1 |
| 165°   | 423.6 | 424.1 | 424.6 | 424.8  | 424.6 | 424.1 | 423.6 | 423.1 | 422.6 | 422.4 | 422.2 |
| 167.5° | 426.6 | 427.3 | 427.9 | 428.2  | 428.0 | 427.5 | 427.0 | 426.5 | 426.0 | 425.8 | 425.6 |
| 170°   | 429.1 | 429.8 | 430.4 | 430.7  | 430.5 | 430.0 | 429.5 | 429.0 | 428.5 | 428.4 | 428.2 |
| 172.5° | 431.0 | 431.7 | 432.3 | 432.6  | 432.4 | 431.9 | 431.4 | 430.9 | 430.4 | 430.3 | 430.1 |
| 175°   | 432.1 | 432.8 | 433.5 | 433.8  | 433.6 | 433.1 | 432.6 | 432.1 | 431.6 | 431.5 | 431.3 |
| 177.5° | 432.5 | 433.2 | 433.8 | 434.1  | 433.9 | 433.4 | 432.9 | 432.4 | 431.9 | 431.8 | 431.8 |
| 180°   | 432.3 | 432.3 | 432.3 | 432.3  | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 150°  | 155°  | 157.5° | 160°  | 165°  | 170°  | 175°  | 180°  | 185°  | 190°  | 195°  |
|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 611.6 | 611.6 | 611.6  | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 |
| 2.5°   | 624.4 | 622.3 | 622.3  | 621.0 | 621.0 | 614.2 | 614.2 | 616.3 | 613.8 | 610.8 | 606.5 |
| 5°     | 640.5 | 635.9 | 634.6  | 632.9 | 627.4 | 618.9 | 615.5 | 614.2 | 609.1 | 602.7 | 595.5 |
| 7.5°   | 655.9 | 648.2 | 644.4  | 640.5 | 633.3 | 621.4 | 614.6 | 609.9 | 602.3 | 592.5 | 583.2 |
| 10°    | 670.7 | 661.0 | 651.2  | 646.5 | 636.3 | 621.4 | 611.6 | 604.0 | 592.9 | 579.8 | 566.6 |
| 12.5°  | 684.3 | 663.9 | 662.2  | 652.9 | 638.0 | 621.0 | 606.1 | 595.1 | 581.0 | 565.7 | 550.4 |
| 15°    | 696.2 | 675.4 | 665.2  | 656.7 | 637.1 | 615.9 | 600.2 | 586.6 | 567.9 | 550.4 | 531.7 |
| 17.5°  | 702.2 | 679.7 | 672.9  | 658.8 | 638.8 | 611.2 | 590.0 | 573.4 | 553.0 | 532.2 | 510.9 |
| 20°    | 708.1 | 681.8 | 670.7  | 661.0 | 633.7 | 602.3 | 578.5 | 559.4 | 536.8 | 512.2 | 488.8 |
| 22.5°  | 711.1 | 681.8 | 668.6  | 655.0 | 628.6 | 592.5 | 564.5 | 541.9 | 515.6 | 490.5 | 462.5 |
| 25°    | 706.0 | 679.2 | 663.5  | 649.5 | 619.7 | 580.6 | 548.3 | 522.8 | 494.8 | 466.3 | 437.8 |
| 27.5°  | 693.3 | 673.3 | 655.0  | 640.5 | 607.4 | 565.3 | 531.3 | 502.4 | 473.5 | 441.6 | 412.7 |
| 30°    | 669.5 | 660.5 | 646.1  | 629.9 | 593.8 | 551.7 | 511.3 | 481.6 | 449.7 | 417.8 | 387.6 |
| 32.5°  | 632.5 | 640.1 | 630.8  | 616.7 | 577.6 | 533.0 | 490.1 | 459.9 | 425.0 | 390.6 | 363.0 |
| 35°    | 587.4 | 614.6 | 609.5  | 599.7 | 560.6 | 513.0 | 470.1 | 433.6 | 398.7 | 363.8 | 336.2 |
| 37.5°  | 538.1 | 579.3 | 583.6  | 577.6 | 541.1 | 492.6 | 445.5 | 409.7 | 374.0 | 338.8 | 310.7 |
| 40°    | 470.5 | 533.9 | 547.5  | 550.0 | 520.7 | 468.0 | 418.7 | 383.8 | 348.5 | 314.1 | 280.1 |
| 42.5°  | 408.5 | 488.4 | 505.4  | 516.0 | 494.8 | 443.8 | 394.0 | 355.3 | 320.5 | 289.5 | 255.5 |
| 45°    | 350.2 | 433.6 | 461.2  | 474.8 | 465.4 | 416.1 | 364.7 | 328.6 | 296.7 | 268.2 | 235.5 |
| 47.5°  | 290.3 | 374.0 | 412.7  | 434.4 | 434.4 | 388.1 | 336.6 | 300.9 | 270.3 | 246.1 | 217.2 |
| 50°    | 250.4 | 320.1 | 360.0  | 388.5 | 396.1 | 359.6 | 311.1 | 276.3 | 247.4 | 221.0 | 198.9 |
| 52.5°  | 213.4 | 275.9 | 309.0  | 338.8 | 360.9 | 329.0 | 282.7 | 251.2 | 222.7 | 198.1 | 180.6 |
| 55°    | 184.5 | 231.2 | 261.4  | 294.1 | 318.8 | 298.0 | 255.0 | 224.4 | 199.8 | 179.4 | 164.5 |
| 57.5°  | 156.8 | 197.6 | 222.3  | 251.2 | 277.6 | 261.8 | 227.4 | 201.0 | 179.4 | 161.5 | 148.3 |
| 60°    | 133.5 | 166.6 | 185.7  | 208.3 | 241.0 | 230.0 | 201.5 | 177.2 | 159.8 | 143.7 | 132.6 |
| 62.5°  | 113.5 | 139.8 | 156.0  | 172.1 | 201.9 | 196.8 | 174.7 | 156.0 | 141.1 | 127.5 | 118.2 |
| 65°    | 93.1  | 114.8 | 127.5  | 141.5 | 165.3 | 167.5 | 149.6 | 136.4 | 122.8 | 110.9 | 102.4 |
| 67.5°  | 75.2  | 92.2  | 103.7  | 115.6 | 134.7 | 140.7 | 128.4 | 117.3 | 105.8 | 96.1  | 88.4  |
| 70°    | 60.8  | 72.7  | 81.2   | 90.5  | 106.3 | 113.5 | 107.1 | 99.5  | 90.1  | 82.0  | 75.2  |
| 72.5°  | 48.0  | 55.7  | 60.8   | 68.0  | 80.8  | 88.0  | 87.6  | 80.8  | 74.0  | 68.4  | 62.9  |
| 75°    | 35.3  | 41.2  | 45.5   | 50.2  | 60.4  | 67.2  | 68.9  | 65.9  | 59.1  | 54.8  | 50.6  |
| 77.5°  | 26.8  | 30.2  | 32.3   | 35.7  | 42.9  | 48.9  | 51.4  | 50.6  | 45.9  | 42.5  | 39.5  |
| 80°    | 20.4  | 21.3  | 22.1   | 23.4  | 29.3  | 34.9  | 36.6  | 36.1  | 33.6  | 32.3  | 28.9  |
| 82.5°  | 14.5  | 14.9  | 15.3   | 15.7  | 17.9  | 22.5  | 24.2  | 25.1  | 23.0  | 21.7  | 18.7  |
| 85°    | 8.5   | 8.9   | 8.9    | 9.8   | 10.2  | 11.5  | 14.5  | 14.5  | 14.0  | 12.3  | 11.9  |
| 87.5°  | 4.3   | 4.3   | 3.8    | 3.8   | 4.3   | 4.7   | 5.5   | 6.4   | 5.5   | 5.1   | 4.7   |
| 90°    | 4.6   | 4.1   | 3.8    | 3.4   | 2.6   | 1.9   | 1.1   | 0.3   | 1.1   | 1.9   | 2.6   |
| 92.5°  | 6.9   | 6.7   | 6.6    | 6.7   | 7.0   | 7.3   | 7.5   | 7.8   | 7.5   | 7.3   | 7.0   |
| 95°    | 10.7  | 10.2  | 10.0   | 11.1  | 13.4  | 15.7  | 18.0  | 20.3  | 18.0  | 15.7  | 13.4  |
| 97.5°  | 12.6  | 11.5  | 10.9   | 13.8  | 19.5  | 25.2  | 30.9  | 36.6  | 30.9  | 25.2  | 19.5  |
| 100°   | 14.3  | 13.1  | 12.5   | 17.3  | 26.8  | 36.3  | 45.9  | 55.4  | 45.9  | 36.3  | 26.8  |
| 102.5° | 56.4  | 69.1  | 75.4   | 75.5  | 75.6  | 75.7  | 75.9  | 76.0  | 75.9  | 75.7  | 75.6  |
| 105°   | 76.0  | 95.0  | 104.5  | 103.5 | 101.4 | 99.3  | 97.2  | 95.1  | 97.2  | 99.3  | 101.4 |
| 107.5° | 90.0  | 113.4 | 125.1  | 124.2 | 122.5 | 120.8 | 119.0 | 117.3 | 119.0 | 120.8 | 122.5 |
| 110°   | 115.0 | 135.1 | 145.1  | 144.4 | 142.9 | 141.5 | 140.0 | 138.6 | 140.0 | 141.5 | 142.9 |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 150°  | 155°  | 157.5° | 160°  | 165°  | 170°  | 175°  | 180°  | 185°  | 190°  | 195°  |
|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 162.4 | 163.6 | 164.2  | 163.6 | 162.3 | 161.1 | 159.8 | 158.6 | 159.8 | 161.1 | 162.3 |
| 115°   | 187.8 | 186.1 | 185.2  | 184.6 | 183.4 | 182.2 | 181.0 | 179.8 | 181.0 | 182.2 | 183.4 |
| 117.5° | 206.4 | 205.2 | 204.6  | 203.9 | 202.5 | 201.1 | 199.7 | 198.3 | 199.7 | 201.1 | 202.5 |
| 120°   | 225.5 | 224.2 | 223.6  | 223.1 | 222.0 | 221.0 | 219.9 | 218.9 | 219.9 | 221.0 | 222.0 |
| 122.5° | 243.6 | 242.2 | 241.5  | 240.9 | 239.8 | 238.7 | 237.6 | 236.5 | 237.6 | 238.7 | 239.8 |
| 125°   | 260.4 | 259.1 | 258.4  | 257.9 | 257.0 | 256.1 | 255.2 | 254.3 | 255.2 | 256.1 | 257.0 |
| 127.5° | 276.5 | 275.4 | 274.9  | 274.4 | 273.5 | 272.5 | 271.6 | 270.6 | 271.6 | 272.5 | 273.5 |
| 130°   | 292.0 | 291.3 | 290.9  | 290.3 | 289.2 | 288.1 | 287.0 | 285.9 | 287.0 | 288.1 | 289.2 |
| 132.5° | 306.7 | 306.0 | 305.6  | 305.1 | 304.2 | 303.3 | 302.4 | 301.5 | 302.4 | 303.3 | 304.2 |
| 135°   | 320.6 | 320.0 | 319.7  | 319.1 | 318.0 | 316.9 | 315.8 | 314.7 | 315.8 | 316.9 | 318.0 |
| 137.5° | 333.2 | 332.5 | 332.2  | 331.8 | 330.9 | 330.1 | 329.2 | 328.4 | 329.2 | 330.1 | 330.9 |
| 140°   | 345.5 | 344.8 | 344.4  | 344.1 | 343.6 | 343.0 | 342.5 | 341.9 | 342.5 | 343.0 | 343.6 |
| 142.5° | 356.7 | 355.8 | 355.3  | 355.1 | 354.6 | 354.1 | 353.6 | 353.1 | 353.6 | 354.1 | 354.6 |
| 145°   | 366.5 | 365.3 | 364.7  | 364.7 | 364.8 | 364.9 | 364.9 | 365.0 | 364.9 | 364.9 | 364.8 |
| 147.5° | 376.2 | 375.0 | 374.4  | 374.5 | 374.7 | 374.9 | 375.1 | 375.3 | 375.1 | 374.9 | 374.7 |
| 150°   | 384.9 | 383.8 | 383.2  | 383.4 | 383.9 | 384.4 | 384.8 | 385.3 | 384.8 | 384.4 | 383.9 |
| 152.5° | 392.9 | 391.8 | 391.3  | 391.6 | 392.1 | 392.7 | 393.2 | 393.8 | 393.2 | 392.7 | 392.1 |
| 155°   | 400.4 | 399.5 | 399.1  | 399.4 | 400.0 | 400.7 | 401.3 | 401.9 | 401.3 | 400.7 | 400.0 |
| 157.5° | 406.9 | 406.3 | 406.0  | 406.3 | 406.8 | 407.4 | 407.9 | 408.5 | 407.9 | 407.4 | 406.8 |
| 160°   | 412.8 | 412.4 | 412.2  | 412.4 | 412.8 | 413.3 | 413.7 | 414.1 | 413.7 | 413.3 | 412.8 |
| 162.5° | 417.7 | 417.4 | 417.2  | 417.4 | 417.8 | 418.3 | 418.7 | 419.1 | 418.7 | 418.3 | 417.8 |
| 165°   | 421.9 | 421.7 | 421.6  | 421.8 | 422.2 | 422.7 | 423.1 | 423.5 | 423.1 | 422.7 | 422.2 |
| 167.5° | 425.4 | 425.2 | 425.1  | 425.3 | 425.7 | 426.1 | 426.5 | 426.9 | 426.5 | 426.1 | 425.7 |
| 170°   | 428.1 | 428.0 | 427.9  | 428.1 | 428.5 | 429.0 | 429.4 | 429.8 | 429.4 | 429.0 | 428.5 |
| 172.5° | 430.0 | 429.9 | 429.8  | 430.0 | 430.4 | 430.8 | 431.2 | 431.6 | 431.2 | 430.8 | 430.4 |
| 175°   | 431.2 | 431.1 | 431.0  | 431.2 | 431.7 | 432.2 | 432.7 | 433.2 | 432.7 | 432.2 | 431.7 |
| 177.5° | 431.7 | 431.6 | 431.6  | 431.8 | 432.3 | 432.8 | 433.3 | 433.8 | 433.3 | 432.8 | 432.3 |
| 180°   | 432.3 | 432.3 | 432.3  | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 200°  | 202.5° | 205°  | 210°  | 215°  | 220°  | 225°  | 230°  | 235°  | 240°  | 245°  |
|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 611.6 | 611.6  | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 |
| 2.5°   | 604.8 | 605.3  | 606.5 | 602.7 | 596.8 | 594.2 | 586.6 | 585.3 | 584.0 | 584.0 | 585.3 |
| 5°     | 591.2 | 589.5  | 590.0 | 582.7 | 574.2 | 569.1 | 558.5 | 560.2 | 554.7 | 551.3 | 552.1 |
| 7.5°   | 576.4 | 571.7  | 571.3 | 561.9 | 551.3 | 541.9 | 530.9 | 528.3 | 523.2 | 517.3 | 514.7 |
| 10°    | 557.7 | 554.3  | 547.9 | 537.3 | 523.7 | 516.0 | 501.1 | 492.2 | 490.9 | 482.0 | 478.6 |
| 12.5°  | 538.5 | 532.6  | 526.2 | 511.3 | 496.0 | 483.7 | 472.7 | 462.9 | 456.1 | 448.4 | 443.3 |
| 15°    | 516.4 | 509.2  | 502.0 | 486.3 | 468.4 | 456.1 | 439.5 | 425.0 | 405.1 | 389.3 | 380.4 |
| 17.5°  | 492.2 | 484.1  | 474.4 | 456.9 | 439.5 | 422.5 | 391.9 | 374.9 | 360.9 | 351.5 | 346.0 |
| 20°    | 467.1 | 458.2  | 448.4 | 431.0 | 400.8 | 371.1 | 354.1 | 340.9 | 332.4 | 323.0 | 316.2 |
| 22.5°  | 440.8 | 431.4  | 420.8 | 393.6 | 361.7 | 340.9 | 327.7 | 315.4 | 303.1 | 298.0 | 294.6 |
| 25°    | 416.1 | 407.6  | 394.0 | 357.0 | 332.0 | 312.8 | 298.0 | 289.9 | 283.5 | 276.7 | 270.3 |
| 27.5°  | 390.6 | 374.9  | 355.8 | 324.7 | 309.0 | 289.5 | 278.8 | 272.9 | 261.8 | 257.2 | 254.2 |
| 30°    | 360.0 | 342.6  | 324.3 | 302.2 | 283.9 | 270.3 | 260.6 | 250.8 | 244.4 | 239.7 | 234.6 |
| 32.5°  | 329.0 | 312.4  | 300.9 | 278.0 | 264.4 | 250.4 | 241.0 | 235.1 | 225.7 | 222.7 | 220.6 |
| 35°    | 302.2 | 288.2  | 278.0 | 259.3 | 246.5 | 233.8 | 227.0 | 218.1 | 212.1 | 206.6 | 203.2 |
| 37.5°  | 275.9 | 268.2  | 257.6 | 241.9 | 228.3 | 218.1 | 208.7 | 205.7 | 197.6 | 194.7 | 191.3 |
| 40°    | 257.6 | 246.1  | 237.2 | 223.6 | 212.1 | 201.0 | 195.1 | 188.3 | 182.8 | 178.1 | 176.8 |
| 42.5°  | 235.5 | 227.0  | 221.9 | 207.0 | 195.1 | 188.7 | 181.5 | 173.8 | 169.6 | 165.8 | 161.1 |
| 45°    | 218.9 | 211.2  | 204.0 | 192.1 | 181.5 | 173.4 | 167.0 | 161.9 | 154.7 | 153.0 | 145.8 |
| 47.5°  | 201.5 | 193.8  | 188.3 | 176.4 | 166.6 | 159.0 | 154.3 | 147.5 | 141.5 | 137.7 | 134.3 |
| 50°    | 184.0 | 177.7  | 172.6 | 162.4 | 153.9 | 145.8 | 139.4 | 132.6 | 130.1 | 123.7 | 121.6 |
| 52.5°  | 167.5 | 163.2  | 157.7 | 147.9 | 139.4 | 132.6 | 125.8 | 120.3 | 116.5 | 113.1 | 110.5 |
| 55°    | 153.4 | 146.6  | 144.1 | 133.5 | 126.2 | 119.0 | 113.1 | 109.7 | 105.0 | 102.9 | 100.7 |
| 57.5°  | 137.7 | 133.9  | 129.6 | 121.6 | 113.5 | 106.7 | 102.4 | 97.3  | 94.8  | 92.2  | 90.5  |
| 60°    | 124.1 | 118.6  | 115.2 | 108.4 | 101.2 | 94.8  | 91.0  | 87.1  | 83.7  | 81.6  | 78.2  |
| 62.5°  | 108.4 | 104.1  | 102.0 | 94.8  | 88.8  | 82.9  | 79.5  | 75.7  | 73.1  | 69.3  | 65.0  |
| 65°    | 94.8  | 91.4   | 88.8  | 82.9  | 77.4  | 71.8  | 68.4  | 63.8  | 60.4  | 58.2  | 57.8  |
| 67.5°  | 82.9  | 80.3   | 76.5  | 71.0  | 65.5  | 61.2  | 57.4  | 53.6  | 53.1  | 52.3  | 52.3  |
| 70°    | 69.7  | 67.2   | 65.0  | 59.1  | 54.4  | 49.7  | 48.9  | 47.6  | 46.3  | 45.9  | 45.1  |
| 72.5°  | 58.2  | 56.1   | 53.6  | 48.5  | 43.8  | 42.5  | 41.7  | 40.8  | 39.5  | 39.1  | 38.7  |
| 75°    | 47.2  | 44.2   | 42.5  | 37.8  | 36.6  | 35.7  | 34.9  | 33.6  | 32.7  | 32.3  | 31.5  |
| 77.5°  | 36.1  | 33.2   | 33.2  | 30.6  | 29.8  | 28.5  | 27.6  | 26.8  | 26.4  | 25.5  | 25.5  |
| 80°    | 25.5  | 25.5   | 24.7  | 23.4  | 22.1  | 21.7  | 20.4  | 20.0  | 19.6  | 20.0  | 19.1  |
| 82.5°  | 18.7  | 17.0   | 17.0  | 16.2  | 15.3  | 14.9  | 14.0  | 14.0  | 13.6  | 13.6  | 13.6  |
| 85°    | 10.6  | 10.6   | 10.2  | 9.4   | 8.9   | 8.9   | 8.5   | 8.5   | 8.1   | 8.1   | 7.7   |
| 87.5°  | 4.3   | 3.8    | 4.3   | 3.8   | 3.8   | 3.4   | 3.4   | 3.4   | 3.0   | 3.4   | 3.0   |
| 90°    | 3.4   | 3.8    | 4.1   | 4.6   | 5.2   | 5.7   | 6.3   | 6.6   | 7.0   | 7.3   | 7.6   |
| 92.5°  | 6.7   | 6.6    | 6.7   | 6.9   | 7.1   | 7.3   | 7.5   | 7.6   | 7.8   | 7.9   | 8.0   |
| 95°    | 11.1  | 10.0   | 10.2  | 10.7  | 11.2  | 11.7  | 12.2  | 12.6  | 12.9  | 13.3  | 13.6  |
| 97.5°  | 13.8  | 10.9   | 11.5  | 12.6  | 13.7  | 14.9  | 16.0  | 16.2  | 16.4  | 16.6  | 16.8  |
| 100°   | 17.3  | 12.5   | 13.1  | 14.3  | 15.4  | 16.6  | 17.8  | 18.4  | 18.9  | 19.5  | 20.0  |
| 102.5° | 75.5  | 75.4   | 69.1  | 56.4  | 43.8  | 31.1  | 18.5  | 19.3  | 20.0  | 20.8  | 21.5  |
| 105°   | 103.5 | 104.5  | 95.0  | 76.0  | 57.1  | 38.1  | 19.1  | 19.9  | 20.6  | 21.4  | 22.1  |
| 107.5° | 124.2 | 125.1  | 113.4 | 90.0  | 66.5  | 43.1  | 19.7  | 20.5  | 21.2  | 22.0  | 22.7  |
| 110°   | 144.4 | 145.1  | 135.1 | 115.0 | 94.9  | 74.8  | 54.7  | 47.8  | 40.8  | 33.9  | 27.0  |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 200°  | 202.5° | 205°  | 210°  | 215°  | 220°  | 225°  | 230°  | 235°  | 240°  | 245°  |
|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 163.6 | 164.2  | 163.6 | 162.4 | 161.3 | 160.1 | 158.9 | 128.9 | 99.0  | 69.0  | 39.1  |
| 115°   | 184.6 | 185.2  | 186.1 | 187.8 | 189.5 | 191.3 | 193.0 | 160.8 | 128.6 | 96.5  | 64.3  |
| 117.5° | 203.9 | 204.6  | 205.2 | 206.4 | 207.5 | 208.7 | 209.9 | 199.9 | 190.0 | 180.0 | 170.1 |
| 120°   | 223.1 | 223.6  | 224.2 | 225.5 | 226.8 | 228.0 | 229.3 | 230.1 | 230.9 | 231.8 | 232.6 |
| 122.5° | 240.9 | 241.5  | 242.2 | 243.6 | 244.9 | 246.3 | 247.7 | 248.1 | 248.5 | 249.0 | 249.4 |
| 125°   | 257.9 | 258.4  | 259.1 | 260.4 | 261.7 | 263.0 | 264.3 | 264.8 | 265.3 | 265.8 | 266.3 |
| 127.5° | 274.4 | 274.9  | 275.4 | 276.5 | 277.5 | 278.6 | 279.6 | 280.3 | 281.0 | 281.7 | 282.4 |
| 130°   | 290.3 | 290.9  | 291.3 | 292.0 | 292.8 | 293.5 | 294.3 | 295.1 | 295.9 | 296.6 | 297.4 |
| 132.5° | 305.1 | 305.6  | 306.0 | 306.7 | 307.5 | 308.2 | 309.0 | 309.6 | 310.2 | 310.9 | 311.5 |
| 135°   | 319.1 | 319.7  | 320.0 | 320.6 | 321.3 | 321.9 | 322.5 | 323.2 | 323.9 | 324.6 | 325.3 |
| 137.5° | 331.8 | 332.2  | 332.5 | 333.2 | 333.9 | 334.6 | 335.3 | 336.0 | 336.7 | 337.4 | 338.1 |
| 140°   | 344.1 | 344.4  | 344.8 | 345.5 | 346.3 | 347.0 | 347.8 | 348.4 | 349.0 | 349.7 | 350.3 |
| 142.5° | 355.1 | 355.3  | 355.8 | 356.7 | 357.6 | 358.5 | 359.4 | 360.0 | 360.5 | 361.1 | 361.6 |
| 145°   | 364.7 | 364.7  | 365.3 | 366.5 | 367.6 | 368.8 | 370.0 | 370.5 | 371.0 | 371.5 | 372.0 |
| 147.5° | 374.5 | 374.4  | 375.0 | 376.2 | 377.3 | 378.5 | 379.7 | 380.1 | 380.4 | 380.8 | 381.1 |
| 150°   | 383.4 | 383.2  | 383.8 | 384.9 | 386.0 | 387.1 | 388.2 | 388.6 | 389.0 | 389.4 | 389.8 |
| 152.5° | 391.6 | 391.3  | 391.8 | 392.9 | 393.9 | 395.0 | 396.0 | 396.4 | 396.8 | 397.3 | 397.7 |
| 155°   | 399.4 | 399.1  | 399.5 | 400.4 | 401.2 | 402.1 | 402.9 | 403.3 | 403.7 | 404.1 | 404.5 |
| 157.5° | 406.3 | 406.0  | 406.3 | 406.9 | 407.6 | 408.2 | 408.8 | 409.3 | 409.8 | 410.3 | 410.8 |
| 160°   | 412.4 | 412.2  | 412.4 | 412.8 | 413.3 | 413.7 | 414.1 | 414.5 | 414.9 | 415.4 | 415.8 |
| 162.5° | 417.4 | 417.2  | 417.4 | 417.7 | 418.1 | 418.4 | 418.8 | 419.3 | 419.8 | 420.3 | 420.8 |
| 165°   | 421.8 | 421.6  | 421.7 | 421.9 | 422.2 | 422.4 | 422.6 | 423.1 | 423.6 | 424.1 | 424.6 |
| 167.5° | 425.3 | 425.1  | 425.2 | 425.4 | 425.6 | 425.8 | 426.0 | 426.5 | 427.0 | 427.5 | 428.0 |
| 170°   | 428.1 | 427.9  | 428.0 | 428.1 | 428.2 | 428.4 | 428.5 | 429.0 | 429.5 | 430.0 | 430.5 |
| 172.5° | 430.0 | 429.8  | 429.9 | 430.0 | 430.1 | 430.3 | 430.4 | 430.9 | 431.4 | 431.9 | 432.4 |
| 175°   | 431.2 | 431.0  | 431.1 | 431.2 | 431.3 | 431.5 | 431.6 | 432.1 | 432.6 | 433.1 | 433.6 |
| 177.5° | 431.8 | 431.6  | 431.6 | 431.7 | 431.8 | 431.8 | 431.9 | 432.4 | 432.9 | 433.4 | 433.9 |
| 180°   | 432.3 | 432.3  | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 250°  | 255°  | 260°  | 265°  | 270°  | 275°  | 280°  | 285°  | 290°  | 292.5° |
|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 0°     | 611.6  | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6  |
| 2.5°   | 585.3  | 584.4 | 581.9 | 582.7 | 581.5 | 581.5 | 580.6 | 580.6 | 580.6 | 582.7 | 581.5  |
| 5°     | 553.4  | 550.4 | 547.5 | 546.2 | 544.9 | 543.6 | 543.6 | 543.2 | 547.0 | 546.2 | 549.6  |
| 7.5°   | 513.9  | 513.0 | 507.1 | 507.1 | 505.0 | 504.1 | 506.2 | 506.7 | 507.1 | 507.9 | 510.1  |
| 10°    | 478.6  | 476.5 | 468.0 | 468.8 | 467.6 | 465.9 | 467.1 | 466.3 | 469.3 | 470.1 | 469.3  |
| 12.5°  | 437.0  | 433.1 | 423.8 | 419.1 | 414.0 | 410.2 | 414.8 | 411.4 | 423.3 | 426.7 | 436.1  |
| 15°    | 381.7  | 374.5 | 368.1 | 368.1 | 363.4 | 360.0 | 362.1 | 366.0 | 368.5 | 372.3 | 374.0  |
| 17.5°  | 344.7  | 341.7 | 336.6 | 333.7 | 332.4 | 331.1 | 331.1 | 332.8 | 338.3 | 337.9 | 341.3  |
| 20°    | 313.3  | 311.6 | 309.0 | 305.2 | 303.9 | 303.1 | 303.1 | 303.1 | 306.9 | 310.3 | 312.4  |
| 22.5°  | 291.6  | 290.3 | 288.6 | 283.5 | 281.0 | 280.1 | 282.2 | 283.5 | 286.5 | 289.0 | 291.2  |
| 25°    | 269.9  | 266.9 | 264.0 | 262.3 | 261.0 | 261.0 | 261.8 | 262.3 | 263.5 | 264.8 | 267.4  |
| 27.5°  | 252.1  | 249.9 | 245.7 | 241.0 | 241.0 | 239.7 | 240.6 | 241.4 | 244.4 | 248.7 | 250.8  |
| 30°    | 232.1  | 231.7 | 230.0 | 228.3 | 226.6 | 225.7 | 227.4 | 228.7 | 229.1 | 231.2 | 231.2  |
| 32.5°  | 217.6  | 214.6 | 211.7 | 210.0 | 209.1 | 208.7 | 209.1 | 210.8 | 210.8 | 213.4 | 216.4  |
| 35°    | 203.2  | 201.5 | 198.5 | 195.5 | 194.7 | 192.5 | 194.2 | 195.9 | 198.9 | 200.2 | 201.5  |
| 37.5°  | 187.4  | 185.3 | 184.0 | 183.2 | 181.5 | 181.9 | 180.6 | 183.2 | 185.7 | 185.3 | 186.2  |
| 40°    | 175.5  | 171.7 | 167.9 | 167.5 | 167.0 | 166.6 | 166.6 | 167.0 | 168.7 | 170.4 | 173.0  |
| 42.5°  | 160.2  | 159.0 | 155.6 | 152.2 | 151.3 | 150.5 | 149.6 | 151.3 | 154.7 | 157.7 | 159.0  |
| 45°    | 144.5  | 142.8 | 142.0 | 139.4 | 137.7 | 137.3 | 136.4 | 138.6 | 141.5 | 142.8 | 143.7  |
| 47.5°  | 130.1  | 129.6 | 127.1 | 127.5 | 126.2 | 126.7 | 126.2 | 127.5 | 127.5 | 128.8 | 129.6  |
| 50°    | 120.3  | 119.0 | 117.7 | 116.9 | 115.6 | 115.6 | 115.2 | 115.6 | 117.3 | 119.0 | 118.6  |
| 52.5°  | 110.5  | 108.4 | 108.0 | 107.5 | 106.7 | 107.5 | 106.3 | 106.7 | 108.4 | 109.2 | 108.8  |
| 55°    | 99.0   | 98.6  | 97.8  | 96.9  | 96.5  | 96.1  | 96.1  | 96.1  | 97.8  | 99.0  | 99.5   |
| 57.5°  | 90.1   | 88.0  | 86.3  | 86.3  | 84.6  | 84.2  | 85.0  | 85.4  | 86.7  | 87.6  | 88.4   |
| 60°    | 77.8   | 76.9  | 74.4  | 73.1  | 70.6  | 70.1  | 70.1  | 71.8  | 74.0  | 76.9  | 77.8   |
| 62.5°  | 64.6   | 63.3  | 62.9  | 62.9  | 62.9  | 62.9  | 62.9  | 62.9  | 62.9  | 63.3  | 63.3   |
| 65°    | 57.4   | 57.8  | 57.4  | 57.0  | 57.4  | 57.4  | 57.0  | 57.0  | 57.0  | 57.4  | 57.8   |
| 67.5°  | 51.4   | 51.0  | 51.4  | 51.0  | 50.6  | 50.6  | 50.2  | 50.6  | 51.0  | 51.4  | 51.4   |
| 70°    | 44.6   | 44.6  | 44.2  | 44.6  | 44.2  | 43.8  | 43.4  | 43.4  | 44.2  | 44.6  | 44.6   |
| 72.5°  | 38.3   | 38.3  | 37.8  | 37.8  | 37.0  | 37.0  | 37.4  | 37.0  | 37.0  | 38.3  | 38.3   |
| 75°    | 31.9   | 31.5  | 31.0  | 31.0  | 30.6  | 30.6  | 30.6  | 30.2  | 31.0  | 31.0  | 31.5   |
| 77.5°  | 25.1   | 25.1  | 25.1  | 24.7  | 24.7  | 24.2  | 24.2  | 24.7  | 24.7  | 24.7  | 25.1   |
| 80°    | 19.1   | 19.1  | 19.1  | 18.7  | 18.3  | 18.3  | 18.3  | 18.3  | 18.3  | 18.7  | 18.3   |
| 82.5°  | 13.2   | 13.2  | 13.2  | 13.2  | 13.2  | 12.8  | 12.8  | 12.8  | 13.2  | 13.2  | 12.8   |
| 85°    | 8.1    | 7.7   | 8.1   | 8.1   | 7.7   | 8.1   | 7.7   | 7.7   | 7.2   | 7.2   | 7.7    |
| 87.5°  | 3.4    | 3.0   | 2.6   | 2.6   | 3.0   | 2.6   | 2.6   | 2.6   | 3.0   | 2.6   | 2.6    |
| 90°    | 7.8    | 7.9   | 8.0   | 8.1   | 8.3   | 8.4   | 8.3   | 8.1   | 8.0   | 7.9   | 7.8    |
| 92.5°  | 8.1    | 8.1   | 8.2   | 8.3   | 8.3   | 8.4   | 8.3   | 8.3   | 8.2   | 8.1   | 8.1    |
| 95°    | 13.8   | 13.8  | 13.7  | 13.6  | 13.5  | 13.4  | 13.5  | 13.6  | 13.7  | 13.8  | 13.8   |
| 97.5°  | 16.9   | 16.9  | 17.0  | 17.1  | 17.1  | 17.2  | 17.1  | 17.1  | 17.0  | 16.9  | 16.9   |
| 100°   | 20.3   | 20.4  | 20.5  | 20.7  | 20.8  | 21.0  | 20.8  | 20.7  | 20.5  | 20.4  | 20.3   |
| 102.5° | 21.9   | 22.0  | 22.2  | 22.4  | 22.6  | 22.8  | 22.6  | 22.4  | 22.2  | 22.0  | 21.9   |
| 105°   | 22.5   | 22.6  | 22.9  | 23.2  | 23.5  | 23.8  | 23.5  | 23.2  | 22.9  | 22.6  | 22.5   |
| 107.5° | 23.1   | 23.2  | 23.5  | 23.8  | 24.1  | 24.4  | 24.1  | 23.8  | 23.5  | 23.2  | 23.1   |
| 110°   | 23.5   | 23.6  | 23.9  | 24.2  | 24.4  | 24.7  | 24.4  | 24.2  | 23.9  | 23.6  | 23.5   |



TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 250°  | 255°  | 260°  | 265°  | 270°  | 275°  | 280°  | 285°  | 290°  | 292.5° |
|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 112.5° | 24.1   | 24.2  | 24.4  | 24.6  | 24.8  | 25.0  | 24.8  | 24.6  | 24.4  | 24.2  | 24.1   |
| 115°   | 48.2   | 45.7  | 40.7  | 35.6  | 30.6  | 25.6  | 30.6  | 35.6  | 40.7  | 45.7  | 48.2   |
| 117.5° | 165.1  | 156.0 | 137.8 | 119.6 | 101.4 | 83.2  | 101.4 | 119.6 | 137.8 | 156.0 | 165.1  |
| 120°   | 233.0  | 228.3 | 218.9 | 209.6 | 200.2 | 190.8 | 200.2 | 209.6 | 218.9 | 228.3 | 233.0  |
| 122.5° | 249.6  | 249.6 | 249.7 | 249.8 | 249.8 | 249.9 | 249.8 | 249.8 | 249.7 | 249.6 | 249.6  |
| 125°   | 266.5  | 266.6 | 266.8 | 267.0 | 267.2 | 267.4 | 267.2 | 267.0 | 266.8 | 266.6 | 266.5  |
| 127.5° | 282.8  | 282.8 | 282.9 | 283.0 | 283.0 | 283.1 | 283.0 | 283.0 | 282.9 | 282.8 | 282.8  |
| 130°   | 297.8  | 297.8 | 297.7 | 297.6 | 297.6 | 297.5 | 297.6 | 297.6 | 297.7 | 297.8 | 297.8  |
| 132.5° | 311.8  | 311.8 | 311.7 | 311.6 | 311.6 | 311.5 | 311.6 | 311.6 | 311.7 | 311.8 | 311.8  |
| 135°   | 325.6  | 325.5 | 325.4 | 325.3 | 325.1 | 325.0 | 325.1 | 325.3 | 325.4 | 325.5 | 325.6  |
| 137.5° | 338.4  | 338.3 | 338.1 | 337.9 | 337.7 | 337.5 | 337.7 | 337.9 | 338.1 | 338.3 | 338.4  |
| 140°   | 350.6  | 350.4 | 350.1 | 349.8 | 349.4 | 349.1 | 349.4 | 349.8 | 350.1 | 350.4 | 350.6  |
| 142.5° | 361.9  | 361.7 | 361.4 | 361.0 | 360.7 | 360.3 | 360.7 | 361.0 | 361.4 | 361.7 | 361.9  |
| 145°   | 372.2  | 372.0 | 371.7 | 371.3 | 371.0 | 370.6 | 371.0 | 371.3 | 371.7 | 372.0 | 372.2  |
| 147.5° | 381.3  | 381.2 | 380.9 | 380.6 | 380.3 | 380.0 | 380.3 | 380.6 | 380.9 | 381.2 | 381.3  |
| 150°   | 390.0  | 389.8 | 389.5 | 389.2 | 388.8 | 388.5 | 388.8 | 389.2 | 389.5 | 389.8 | 390.0  |
| 152.5° | 397.9  | 397.7 | 397.2 | 396.7 | 396.2 | 395.7 | 396.2 | 396.7 | 397.2 | 397.7 | 397.9  |
| 155°   | 404.7  | 404.4 | 403.9 | 403.3 | 402.8 | 402.2 | 402.8 | 403.3 | 403.9 | 404.4 | 404.7  |
| 157.5° | 411.0  | 410.7 | 410.2 | 409.6 | 409.1 | 408.5 | 409.1 | 409.6 | 410.2 | 410.7 | 411.0  |
| 160°   | 416.0  | 415.8 | 415.3 | 414.8 | 414.3 | 413.8 | 414.3 | 414.8 | 415.3 | 415.8 | 416.0  |
| 162.5° | 421.0  | 420.7 | 420.1 | 419.4 | 418.8 | 418.2 | 418.8 | 419.4 | 420.1 | 420.7 | 421.0  |
| 165°   | 424.8  | 424.6 | 424.1 | 423.6 | 423.1 | 422.6 | 423.1 | 423.6 | 424.1 | 424.6 | 424.8  |
| 167.5° | 428.2  | 427.9 | 427.3 | 426.6 | 426.0 | 425.4 | 426.0 | 426.6 | 427.3 | 427.9 | 428.2  |
| 170°   | 430.7  | 430.4 | 429.8 | 429.1 | 428.5 | 427.9 | 428.5 | 429.1 | 429.8 | 430.4 | 430.7  |
| 172.5° | 432.6  | 432.3 | 431.7 | 431.0 | 430.4 | 429.8 | 430.4 | 431.0 | 431.7 | 432.3 | 432.6  |
| 175°   | 433.8  | 433.5 | 432.8 | 432.1 | 431.4 | 430.7 | 431.4 | 432.1 | 432.8 | 433.5 | 433.8  |
| 177.5° | 434.1  | 433.8 | 433.2 | 432.5 | 431.9 | 431.3 | 431.9 | 432.5 | 433.2 | 433.8 | 434.1  |
| 180°   | 432.3  | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3  |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 295°  | 300°  | 305°  | 310°  | 315°  | 320°  | 325°  | 330°  | 335°  | 337.5° | 340°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 0°     | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6 | 611.6  | 611.6 |
| 2.5°   | 582.7 | 584.9 | 584.0 | 579.3 | 584.0 | 585.3 | 587.8 | 590.4 | 592.1 | 594.6  | 596.8 |
| 5°     | 546.2 | 550.4 | 553.0 | 550.4 | 558.9 | 560.2 | 566.2 | 569.6 | 574.7 | 578.9  | 582.3 |
| 7.5°   | 511.8 | 515.2 | 520.3 | 521.1 | 526.2 | 532.2 | 540.7 | 549.2 | 557.2 | 561.5  | 565.3 |
| 10°    | 474.8 | 480.7 | 488.4 | 486.7 | 494.3 | 503.7 | 512.6 | 526.2 | 533.0 | 540.7  | 547.5 |
| 12.5°  | 437.8 | 441.6 | 451.8 | 455.2 | 466.3 | 473.5 | 485.8 | 494.3 | 511.3 | 520.3  | 526.2 |
| 15°    | 373.2 | 388.9 | 401.7 | 417.0 | 431.4 | 445.0 | 456.1 | 471.4 | 486.3 | 493.1  | 502.8 |
| 17.5°  | 343.9 | 351.1 | 358.7 | 366.4 | 385.1 | 409.3 | 428.9 | 445.5 | 458.2 | 467.1  | 478.6 |
| 20°    | 313.3 | 320.5 | 329.0 | 336.2 | 347.7 | 365.1 | 389.3 | 417.8 | 433.1 | 442.5  | 453.5 |
| 22.5°  | 291.6 | 298.4 | 303.9 | 310.3 | 319.2 | 332.0 | 350.2 | 385.5 | 405.9 | 417.4  | 427.2 |
| 25°    | 268.2 | 276.7 | 282.7 | 287.3 | 294.6 | 308.6 | 323.5 | 343.4 | 380.0 | 388.9  | 402.5 |
| 27.5°  | 252.1 | 254.6 | 261.4 | 268.6 | 275.9 | 283.5 | 298.8 | 315.8 | 340.5 | 360.0  | 376.6 |
| 30°    | 232.9 | 239.3 | 245.7 | 248.7 | 255.0 | 266.1 | 275.4 | 293.7 | 312.8 | 328.1  | 348.1 |
| 32.5°  | 218.5 | 222.3 | 226.6 | 233.8 | 239.7 | 247.4 | 256.7 | 272.0 | 288.2 | 298.0  | 313.3 |
| 35°    | 202.3 | 204.9 | 213.8 | 216.8 | 222.7 | 230.4 | 239.7 | 251.6 | 269.1 | 276.7  | 287.8 |
| 37.5°  | 187.0 | 193.0 | 195.5 | 202.3 | 207.8 | 215.5 | 222.3 | 235.9 | 247.4 | 256.3  | 266.5 |
| 40°    | 175.1 | 177.7 | 182.3 | 188.3 | 193.0 | 198.9 | 207.4 | 217.2 | 229.5 | 236.8  | 245.7 |
| 42.5°  | 160.7 | 162.8 | 168.7 | 172.1 | 179.8 | 185.3 | 190.4 | 202.3 | 213.4 | 218.9  | 227.8 |
| 45°    | 144.9 | 150.0 | 153.9 | 160.7 | 164.9 | 171.7 | 178.1 | 186.6 | 196.8 | 203.2  | 208.3 |
| 47.5°  | 131.3 | 136.4 | 140.3 | 146.6 | 153.4 | 156.4 | 163.2 | 172.1 | 181.5 | 186.6  | 193.8 |
| 50°    | 120.3 | 122.0 | 129.2 | 132.2 | 139.4 | 145.4 | 150.0 | 157.7 | 167.9 | 170.9  | 176.8 |
| 52.5°  | 109.7 | 110.9 | 115.6 | 119.4 | 125.8 | 130.9 | 136.9 | 144.1 | 152.6 | 157.3  | 161.9 |
| 55°    | 100.3 | 101.2 | 103.3 | 107.5 | 111.8 | 118.2 | 123.7 | 130.5 | 137.7 | 142.8  | 147.1 |
| 57.5°  | 89.7  | 91.4  | 93.1  | 95.6  | 99.9  | 105.8 | 111.8 | 118.2 | 124.1 | 127.5  | 133.0 |
| 60°    | 77.4  | 79.9  | 82.9  | 85.9  | 88.8  | 93.1  | 99.9  | 105.8 | 111.4 | 114.3  | 118.6 |
| 62.5°  | 64.2  | 69.3  | 71.8  | 75.2  | 77.8  | 81.6  | 86.7  | 93.5  | 97.3  | 101.2  | 104.6 |
| 65°    | 57.8  | 58.2  | 58.7  | 62.1  | 66.7  | 70.6  | 75.2  | 80.3  | 86.3  | 88.8   | 91.4  |
| 67.5°  | 51.4  | 51.9  | 52.7  | 53.1  | 54.8  | 59.1  | 64.2  | 69.7  | 74.4  | 76.1   | 78.6  |
| 70°    | 45.1  | 45.1  | 46.8  | 47.2  | 47.6  | 48.0  | 52.3  | 57.8  | 62.1  | 64.2   | 67.2  |
| 72.5°  | 38.3  | 38.7  | 39.5  | 40.0  | 40.8  | 41.7  | 42.9  | 45.9  | 51.0  | 53.1   | 56.5  |
| 75°    | 31.5  | 31.9  | 32.3  | 32.7  | 34.0  | 34.4  | 35.7  | 37.4  | 39.5  | 42.1   | 44.2  |
| 77.5°  | 25.1  | 25.1  | 25.5  | 26.4  | 27.2  | 27.6  | 28.9  | 29.8  | 30.6  | 31.9   | 33.6  |
| 80°    | 18.7  | 19.1  | 19.1  | 20.0  | 20.0  | 20.4  | 20.8  | 22.1  | 23.0  | 23.8   | 24.7  |
| 82.5°  | 12.8  | 13.6  | 13.6  | 13.6  | 14.0  | 14.5  | 14.9  | 14.9  | 15.7  | 16.2   | 17.4  |
| 85°    | 7.7   | 8.1   | 8.1   | 8.1   | 7.7   | 8.5   | 8.5   | 8.9   | 8.9   | 8.9    | 9.4   |
| 87.5°  | 3.0   | 2.6   | 3.0   | 3.0   | 3.0   | 3.4   | 3.0   | 3.0   | 3.4   | 3.8    | 3.8   |
| 90°    | 7.6   | 7.3   | 7.0   | 6.6   | 6.3   | 5.7   | 5.2   | 4.6   | 4.1   | 3.8    | 3.4   |
| 92.5°  | 8.0   | 7.9   | 7.8   | 7.6   | 7.5   | 7.3   | 7.1   | 6.9   | 6.7   | 6.6    | 6.7   |
| 95°    | 13.6  | 13.3  | 12.9  | 12.6  | 12.2  | 11.7  | 11.2  | 10.7  | 10.2  | 10.0   | 11.1  |
| 97.5°  | 16.8  | 16.6  | 16.4  | 16.2  | 16.0  | 14.9  | 13.7  | 12.6  | 11.5  | 10.9   | 13.8  |
| 100°   | 20.0  | 19.5  | 18.9  | 18.4  | 17.8  | 16.6  | 15.4  | 14.3  | 13.1  | 12.5   | 17.3  |
| 102.5° | 21.5  | 20.8  | 20.0  | 19.3  | 18.5  | 31.1  | 43.8  | 56.4  | 69.1  | 75.4   | 75.5  |
| 105°   | 22.1  | 21.4  | 20.6  | 19.9  | 19.1  | 38.1  | 57.1  | 76.0  | 95.0  | 104.5  | 103.5 |
| 107.5° | 22.7  | 22.0  | 21.2  | 20.5  | 19.7  | 43.1  | 66.5  | 90.0  | 113.4 | 125.1  | 124.2 |
| 110°   | 27.0  | 33.9  | 40.8  | 47.8  | 54.7  | 74.8  | 94.9  | 115.0 | 135.1 | 145.1  | 144.4 |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 295°  | 300°  | 305°  | 310°  | 315°  | 320°  | 325°  | 330°  | 335°  | 337.5° | 340°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 112.5° | 39.1  | 69.0  | 99.0  | 128.9 | 158.9 | 160.1 | 161.3 | 162.4 | 163.6 | 164.2  | 163.6 |
| 115°   | 64.3  | 96.5  | 128.6 | 160.8 | 193.0 | 191.3 | 189.5 | 187.8 | 186.1 | 185.2  | 184.6 |
| 117.5° | 170.1 | 180.0 | 190.0 | 199.9 | 209.9 | 208.7 | 207.5 | 206.4 | 205.2 | 204.6  | 203.9 |
| 120°   | 232.6 | 231.8 | 230.9 | 230.1 | 229.3 | 228.0 | 226.8 | 225.5 | 224.2 | 223.6  | 223.1 |
| 122.5° | 249.4 | 249.0 | 248.5 | 248.1 | 247.7 | 246.3 | 244.9 | 243.6 | 242.2 | 241.5  | 240.9 |
| 125°   | 266.3 | 265.8 | 265.3 | 264.8 | 264.3 | 263.0 | 261.7 | 260.4 | 259.1 | 258.4  | 257.9 |
| 127.5° | 282.4 | 281.7 | 281.0 | 280.3 | 279.6 | 278.6 | 277.5 | 276.5 | 275.4 | 274.9  | 274.4 |
| 130°   | 297.4 | 296.6 | 295.9 | 295.1 | 294.3 | 293.5 | 292.8 | 292.0 | 291.3 | 290.9  | 290.3 |
| 132.5° | 311.5 | 310.9 | 310.2 | 309.6 | 309.0 | 308.2 | 307.5 | 306.7 | 306.0 | 305.6  | 305.1 |
| 135°   | 325.3 | 324.6 | 323.9 | 323.2 | 322.5 | 321.9 | 321.3 | 320.6 | 320.0 | 319.7  | 319.1 |
| 137.5° | 338.1 | 337.4 | 336.7 | 336.0 | 335.3 | 334.6 | 333.9 | 333.2 | 332.5 | 332.2  | 331.8 |
| 140°   | 350.3 | 349.7 | 349.0 | 348.4 | 347.8 | 347.0 | 346.3 | 345.5 | 344.8 | 344.4  | 344.1 |
| 142.5° | 361.6 | 361.1 | 360.5 | 360.0 | 359.4 | 358.5 | 357.6 | 356.7 | 355.8 | 355.3  | 355.1 |
| 145°   | 372.0 | 371.5 | 371.0 | 370.5 | 370.0 | 368.8 | 367.6 | 366.5 | 365.3 | 364.7  | 364.7 |
| 147.5° | 381.1 | 380.8 | 380.4 | 380.1 | 379.7 | 378.5 | 377.3 | 376.2 | 375.0 | 374.4  | 374.5 |
| 150°   | 389.8 | 389.4 | 389.0 | 388.6 | 388.2 | 387.1 | 386.0 | 384.9 | 383.8 | 383.2  | 383.4 |
| 152.5° | 397.7 | 397.3 | 396.8 | 396.4 | 396.0 | 395.0 | 393.9 | 392.9 | 391.8 | 391.3  | 391.6 |
| 155°   | 404.5 | 404.1 | 403.7 | 403.3 | 402.9 | 402.1 | 401.2 | 400.4 | 399.5 | 399.1  | 399.4 |
| 157.5° | 410.8 | 410.3 | 409.8 | 409.3 | 408.8 | 408.2 | 407.6 | 406.9 | 406.3 | 406.0  | 406.3 |
| 160°   | 415.8 | 415.4 | 414.9 | 414.5 | 414.1 | 413.7 | 413.3 | 412.8 | 412.4 | 412.2  | 412.4 |
| 162.5° | 420.8 | 420.3 | 419.8 | 419.3 | 418.8 | 418.4 | 418.1 | 417.7 | 417.4 | 417.2  | 417.4 |
| 165°   | 424.6 | 424.1 | 423.6 | 423.1 | 422.6 | 422.4 | 422.2 | 421.9 | 421.7 | 421.6  | 421.8 |
| 167.5° | 428.0 | 427.5 | 427.0 | 426.5 | 426.0 | 425.8 | 425.6 | 425.4 | 425.2 | 425.1  | 425.3 |
| 170°   | 430.5 | 430.0 | 429.5 | 429.0 | 428.5 | 428.4 | 428.2 | 428.1 | 428.0 | 427.9  | 428.1 |
| 172.5° | 432.4 | 431.9 | 431.4 | 430.9 | 430.4 | 430.3 | 430.1 | 430.0 | 429.9 | 429.8  | 430.0 |
| 175°   | 433.6 | 433.1 | 432.6 | 432.1 | 431.6 | 431.5 | 431.3 | 431.2 | 431.1 | 431.0  | 431.2 |
| 177.5° | 433.9 | 433.4 | 432.9 | 432.4 | 431.9 | 431.8 | 431.8 | 431.7 | 431.6 | 431.6  | 431.8 |
| 180°   | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3 | 432.3  | 432.3 |

TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 345°  | 350°  | 355°  | 360°  |
|--------|-------|-------|-------|-------|
| 0°     | 611.6 | 611.6 | 611.6 | 611.6 |
| 2.5°   | 600.6 | 599.3 | 607.0 | 615.5 |
| 5°     | 588.3 | 590.4 | 600.2 | 612.1 |
| 7.5°   | 575.5 | 580.2 | 591.7 | 607.4 |
| 10°    | 557.7 | 566.2 | 583.6 | 599.7 |
| 12.5°  | 540.2 | 551.7 | 568.3 | 587.4 |
| 15°    | 520.7 | 533.4 | 553.8 | 576.8 |
| 17.5°  | 499.0 | 513.5 | 537.3 | 562.3 |
| 20°    | 476.1 | 495.2 | 520.3 | 547.5 |
| 22.5°  | 450.6 | 473.5 | 499.4 | 529.6 |
| 25°    | 425.9 | 451.0 | 476.9 | 511.8 |
| 27.5°  | 401.7 | 426.3 | 455.2 | 490.5 |
| 30°    | 377.4 | 400.0 | 431.0 | 468.8 |
| 32.5°  | 351.5 | 374.9 | 407.6 | 446.3 |
| 35°    | 327.7 | 351.1 | 381.7 | 419.9 |
| 37.5°  | 302.2 | 327.3 | 356.6 | 396.1 |
| 40°    | 272.5 | 301.8 | 330.3 | 368.1 |
| 42.5°  | 247.8 | 278.8 | 306.5 | 342.2 |
| 45°    | 228.3 | 257.6 | 280.5 | 315.4 |
| 47.5°  | 210.0 | 233.8 | 257.2 | 289.5 |
| 50°    | 192.5 | 210.8 | 235.1 | 264.0 |
| 52.5°  | 174.7 | 190.4 | 211.2 | 238.5 |
| 55°    | 158.5 | 173.4 | 192.1 | 212.9 |
| 57.5°  | 143.7 | 154.3 | 173.0 | 191.7 |
| 60°    | 127.1 | 138.1 | 152.6 | 168.3 |
| 62.5°  | 113.1 | 121.6 | 135.2 | 148.3 |
| 65°    | 98.2  | 106.3 | 116.5 | 128.8 |
| 67.5°  | 84.6  | 91.8  | 99.9  | 109.7 |
| 70°    | 72.3  | 77.8  | 83.7  | 92.2  |
| 72.5°  | 59.1  | 65.0  | 70.6  | 77.4  |
| 75°    | 48.5  | 51.0  | 55.7  | 60.4  |
| 77.5°  | 37.4  | 40.8  | 43.4  | 47.2  |
| 80°    | 26.8  | 29.8  | 30.6  | 33.6  |
| 82.5°  | 17.9  | 19.6  | 21.3  | 22.1  |
| 85°    | 10.2  | 11.1  | 12.8  | 13.2  |
| 87.5°  | 3.8   | 4.3   | 5.1   | 6.0   |
| 90°    | 2.6   | 1.9   | 1.1   | 0.3   |
| 92.5°  | 7.0   | 7.3   | 7.5   | 7.8   |
| 95°    | 13.4  | 15.7  | 18.0  | 20.3  |
| 97.5°  | 19.5  | 25.2  | 30.9  | 36.6  |
| 100°   | 26.8  | 36.3  | 45.9  | 55.4  |
| 102.5° | 75.6  | 75.7  | 75.9  | 76.0  |
| 105°   | 101.4 | 99.3  | 97.2  | 95.1  |
| 107.5° | 122.5 | 120.8 | 119.0 | 117.3 |
| 110°   | 142.9 | 141.5 | 140.0 | 138.6 |



TEST NUMBER: P999515

CATALOG NUMBER: SA2XXRDIP-B290D330UB2750-4F0-XX-W2A-A\_5000K

**CANDELA DISTRIBUTION (continued):**

|        | 345°  | 350°  | 355°  | 360°  |
|--------|-------|-------|-------|-------|
| 112.5° | 162.3 | 161.1 | 159.8 | 158.6 |
| 115°   | 183.4 | 182.2 | 181.0 | 179.8 |
| 117.5° | 202.5 | 201.1 | 199.7 | 198.3 |
| 120°   | 222.0 | 221.0 | 219.9 | 218.9 |
| 122.5° | 239.8 | 238.7 | 237.6 | 236.5 |
| 125°   | 257.0 | 256.1 | 255.2 | 254.3 |
| 127.5° | 273.5 | 272.5 | 271.6 | 270.6 |
| 130°   | 289.2 | 288.1 | 287.0 | 285.9 |
| 132.5° | 304.2 | 303.3 | 302.4 | 301.5 |
| 135°   | 318.0 | 316.9 | 315.8 | 314.7 |
| 137.5° | 330.9 | 330.1 | 329.2 | 328.4 |
| 140°   | 343.6 | 343.0 | 342.5 | 341.9 |
| 142.5° | 354.6 | 354.1 | 353.6 | 353.1 |
| 145°   | 364.8 | 364.9 | 364.9 | 365.0 |
| 147.5° | 374.7 | 374.9 | 375.1 | 375.3 |
| 150°   | 383.9 | 384.4 | 384.8 | 385.3 |
| 152.5° | 392.1 | 392.7 | 393.2 | 393.8 |
| 155°   | 400.0 | 400.7 | 401.3 | 401.9 |
| 157.5° | 406.8 | 407.4 | 407.9 | 408.5 |
| 160°   | 412.8 | 413.3 | 413.7 | 414.1 |
| 162.5° | 417.8 | 418.3 | 418.7 | 419.1 |
| 165°   | 422.2 | 422.7 | 423.1 | 423.5 |
| 167.5° | 425.7 | 426.1 | 426.5 | 426.9 |
| 170°   | 428.5 | 429.0 | 429.4 | 429.8 |
| 172.5° | 430.4 | 430.8 | 431.2 | 431.6 |
| 175°   | 431.7 | 432.2 | 432.7 | 433.2 |
| 177.5° | 432.3 | 432.8 | 433.3 | 433.8 |
| 180°   | 432.3 | 432.3 | 432.3 | 432.3 |

(END OF REPORT)