

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P998081

Luminaire Tested: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P998081  
REPORT IS A COMBINATION OF REPORTS P983818 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A  
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}  
Light Source: -  
Ballast/Driver: -

**Summary**

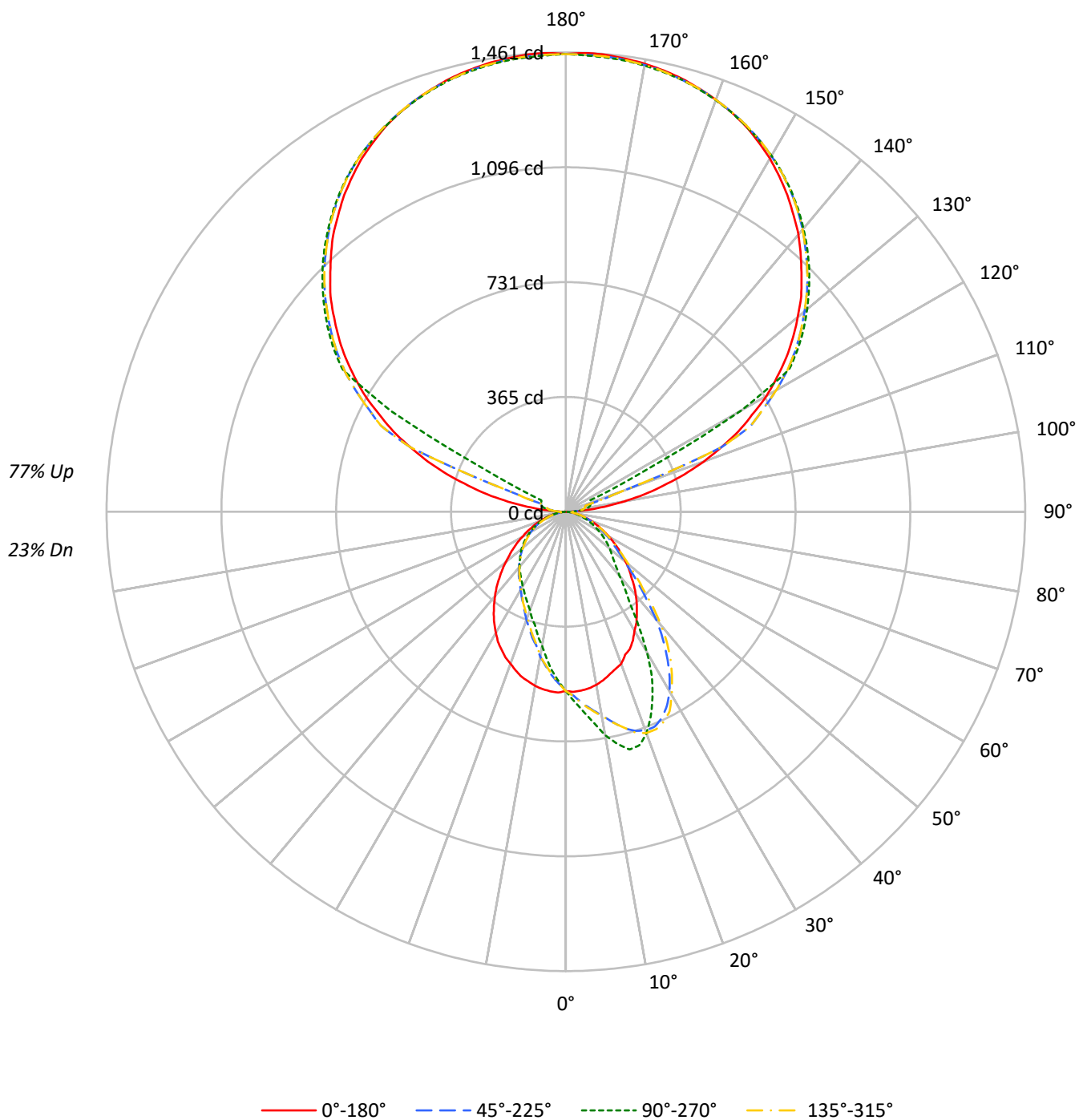
Lumens per Lamp: N/A  
Luminaire Lumens: 5528.0 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 48  
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: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

### Luminous Intensity Polar Plot



TEST NUMBER: P998081

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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   | 101 | 101 | 101 | 101 | 89 | 89 | 89 | 89 | 68 | 68 | 68 | 49 | 49 | 49 | 31 | 31 | 31 | 31 | 31 | 23 |
| 1   | 92  | 88  | 84  | 81  | 81 | 78 | 75 | 72 | 60 | 58 | 56 | 43 | 42 | 41 | 28 | 27 | 27 | 27 | 27 | 20 |
| 2   | 84  | 77  | 71  | 66  | 74 | 68 | 64 | 60 | 53 | 50 | 47 | 38 | 36 | 34 | 25 | 24 | 23 | 23 | 23 | 17 |
| 3   | 77  | 68  | 61  | 55  | 68 | 60 | 55 | 50 | 47 | 43 | 40 | 34 | 31 | 29 | 22 | 21 | 20 | 20 | 20 | 14 |
| 4   | 70  | 60  | 53  | 47  | 62 | 54 | 47 | 42 | 41 | 37 | 34 | 30 | 28 | 25 | 20 | 18 | 17 | 17 | 17 | 13 |
| 5   | 64  | 53  | 46  | 40  | 57 | 48 | 41 | 36 | 37 | 33 | 29 | 27 | 24 | 22 | 18 | 16 | 15 | 15 | 15 | 11 |
| 6   | 59  | 48  | 40  | 35  | 52 | 43 | 36 | 31 | 33 | 29 | 25 | 25 | 22 | 19 | 16 | 15 | 13 | 13 | 13 | 10 |
| 7   | 55  | 43  | 35  | 30  | 48 | 39 | 32 | 28 | 30 | 26 | 22 | 22 | 19 | 17 | 15 | 13 | 12 | 12 | 12 | 9  |
| 8   | 51  | 39  | 32  | 27  | 45 | 35 | 29 | 24 | 27 | 23 | 20 | 20 | 17 | 15 | 14 | 12 | 11 | 11 | 11 | 8  |
| 9   | 47  | 35  | 28  | 24  | 42 | 32 | 26 | 22 | 25 | 21 | 17 | 19 | 16 | 14 | 13 | 11 | 10 | 10 | 10 | 7  |
| 10  | 44  | 32  | 26  | 21  | 39 | 29 | 23 | 19 | 23 | 19 | 16 | 17 | 14 | 12 | 12 | 10 | 9  | 9  | 9  | 7  |

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

|     | 0°   | 90°   | 180° | 270° |
|-----|------|-------|------|------|
| 0°  | 9026 | 9026  | 9026 | 9026 |
| 5°  | 9047 | 9623  | 9082 | 7656 |
| 10° | 8942 | 10506 | 8998 | 6312 |
| 15° | 8725 | 11080 | 8846 | 5317 |
| 20° | 8589 | 10405 | 8589 | 4622 |
| 25° | 8316 | 8938  | 8353 | 4132 |
| 30° | 7865 | 7027  | 8014 | 3744 |
| 35° | 7466 | 4859  | 7591 | 3424 |
| 40° | 7007 | 3669  | 7088 | 3171 |
| 45° | 6443 | 3015  | 6548 | 2896 |
| 50° | 5952 | 2646  | 5964 | 2652 |
| 55° | 5396 | 2254  | 5430 | 2386 |
| 60° | 4801 | 1883  | 4867 | 2082 |
| 65° | 4269 | 1532  | 4348 | 1779 |
| 70° | 3737 | 1201  | 3833 | 1435 |
| 75° | 3138 | 873   | 3261 | 1039 |
| 80° | 2451 | 553   | 2627 | 618  |
| 85° | 1610 | 277   | 1737 | 207  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 157.5°

Vertical Angle: 45°

Luminance: 9330 cd/sqm

TEST NUMBER: P998081

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 54.3   | 1.0       |
| 10°-20°   | 158.1  | 2.9       |
| 20°-30°   | 229.4  | 4.1       |
| 30°-40°   | 241.8  | 4.4       |
| 40°-50°   | 214.0  | 3.9       |
| 50°-60°   | 170.9  | 3.1       |
| 60°-70°   | 116.1  | 2.1       |
| 70°-80°   | 59.4   | 1.1       |
| 80°-90°   | 16.6   | 0.3       |
| 90°-100°  | 48.0   | 0.9       |
| 100°-110° | 178.9  | 3.2       |
| 110°-120° | 474.6  | 8.6       |
| 120°-130° | 787.1  | 14.2      |
| 130°-140° | 836.1  | 15.1      |
| 140°-150° | 777.0  | 14.1      |
| 150°-160° | 624.7  | 11.3      |
| 160°-170° | 402.5  | 7.3       |
| 170°-180° | 138.5  | 2.5       |
| 0°-30°    | 441.8  | 8.0       |
| 0°-40°    | 683.6  | 12.4      |
| 0°-60°    | 1068.5 | 19.3      |
| 0°-90°    | 1260.6 | 22.8      |
| 90°-120°  | 701.5  | 12.7      |
| 90°-150°  | 3101.6 | 56.1      |
| 90°-180°  | 4267.0 | 77.2      |
| 0°-180°   | 5528.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 90°  | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0°   | 570  | 570  | 570  | 570  | 570  |      |
| 5°   | 571  | 637  | 573  | 507  | 571  | 54   |
| 15°  | 536  | 783  | 543  | 376  | 536  | 151  |
| 25°  | 482  | 652  | 484  | 302  | 482  | 220  |
| 35°  | 393  | 355  | 400  | 250  | 393  | 246  |
| 45°  | 295  | 214  | 300  | 206  | 295  | 229  |
| 55°  | 202  | 150  | 204  | 159  | 202  | 181  |
| 65°  | 120  | 92   | 122  | 107  | 120  | 119  |
| 75°  | 56   | 46   | 58   | 54   | 56   | 60   |
| 85°  | 11   | 12   | 12   | 9    | 11   | 13   |
| 90°  | 1    | 28   | 1    | 28   | 1    | 5    |
| 95°  | 68   | 45   | 68   | 45   | 68   | 81   |
| 105° | 320  | 80   | 320  | 80   | 320  | 342  |
| 115° | 606  | 86   | 606  | 86   | 606  | 596  |
| 125° | 856  | 901  | 856  | 901  | 856  | 764  |
| 135° | 1060 | 1094 | 1060 | 1094 | 1060 | 819  |
| 145° | 1229 | 1248 | 1229 | 1248 | 1229 | 769  |
| 155° | 1354 | 1354 | 1354 | 1354 | 1354 | 624  |
| 165° | 1426 | 1423 | 1426 | 1423 | 1426 | 403  |
| 175° | 1459 | 1450 | 1459 | 1450 | 1459 | 139  |
| 180° | 1456 | 1456 | 1456 | 1456 | 1456 |      |

TEST NUMBER: P998081

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 22.5° | 25°   | 30°   | 35°   | 40°   | 45°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 |
| 2.5°   | 573.3 | 574.6 | 576.8 | 577.2 | 581.6 | 585.1 | 589.0 | 589.0 | 590.3 | 589.9 | 586.4 |
| 5°     | 570.6 | 574.6 | 580.3 | 585.1 | 593.0 | 596.5 | 601.7 | 605.7 | 609.2 | 611.8 | 611.4 |
| 7.5°   | 566.2 | 573.3 | 581.6 | 590.8 | 601.3 | 607.4 | 614.9 | 621.9 | 626.7 | 631.1 | 634.2 |
| 10°    | 558.8 | 570.6 | 582.0 | 594.3 | 607.9 | 616.2 | 625.0 | 634.2 | 641.6 | 649.9 | 657.8 |
| 12.5°  | 548.7 | 565.8 | 579.8 | 596.0 | 612.7 | 621.9 | 635.9 | 642.9 | 657.4 | 678.4 | 684.1 |
| 15°    | 536.0 | 559.2 | 572.4 | 593.0 | 614.9 | 622.3 | 641.6 | 653.0 | 682.8 | 696.0 | 711.7 |
| 17.5°  | 524.2 | 550.0 | 567.6 | 591.2 | 612.7 | 627.2 | 646.0 | 669.2 | 694.2 | 713.1 | 730.6 |
| 20°    | 514.5 | 539.5 | 560.5 | 586.8 | 614.0 | 632.4 | 652.1 | 680.2 | 707.4 | 726.6 | 740.2 |
| 22.5°  | 492.6 | 524.6 | 549.1 | 578.5 | 611.4 | 636.8 | 655.6 | 686.3 | 715.7 | 727.5 | 739.4 |
| 25°    | 481.7 | 509.3 | 537.8 | 571.1 | 609.6 | 639.9 | 656.1 | 690.3 | 716.1 | 720.5 | 723.1 |
| 27.5°  | 461.5 | 492.6 | 525.9 | 564.0 | 609.2 | 634.6 | 655.2 | 686.3 | 706.9 | 703.9 | 696.0 |
| 30°    | 436.5 | 474.6 | 511.5 | 552.7 | 603.1 | 630.7 | 649.9 | 678.4 | 689.0 | 673.2 | 659.2 |
| 32.5°  | 418.1 | 454.0 | 494.8 | 542.6 | 596.0 | 622.3 | 641.2 | 663.5 | 665.7 | 637.2 | 613.6 |
| 35°    | 393.1 | 433.0 | 479.0 | 529.4 | 584.2 | 607.9 | 625.4 | 639.0 | 628.5 | 588.6 | 560.5 |
| 37.5°  | 370.8 | 410.2 | 459.3 | 510.6 | 568.0 | 591.2 | 605.2 | 607.4 | 581.6 | 546.5 | 505.3 |
| 40°    | 346.2 | 387.0 | 438.3 | 492.2 | 550.0 | 570.2 | 578.9 | 572.4 | 535.1 | 494.4 | 446.6 |
| 42.5°  | 321.7 | 362.0 | 417.2 | 472.5 | 527.2 | 544.3 | 547.8 | 529.9 | 484.3 | 436.5 | 381.3 |
| 45°    | 295.0 | 337.0 | 392.2 | 447.9 | 500.9 | 510.6 | 511.0 | 485.2 | 431.3 | 381.3 | 330.0 |
| 47.5°  | 273.0 | 312.0 | 366.8 | 422.5 | 467.2 | 473.8 | 471.1 | 441.3 | 382.6 | 326.5 | 281.8 |
| 50°    | 248.9 | 286.2 | 340.5 | 395.3 | 433.4 | 435.2 | 428.6 | 386.1 | 328.7 | 277.4 | 241.9 |
| 52.5°  | 223.1 | 260.8 | 310.7 | 363.3 | 397.5 | 394.9 | 382.2 | 336.6 | 282.7 | 240.2 | 213.0 |
| 55°    | 202.5 | 235.8 | 282.7 | 334.0 | 358.1 | 350.6 | 336.6 | 290.1 | 247.6 | 211.7 | 188.0 |
| 57.5°  | 179.7 | 209.1 | 255.1 | 299.8 | 313.8 | 306.8 | 292.8 | 249.4 | 209.9 | 182.8 | 167.0 |
| 60°    | 158.2 | 184.9 | 225.3 | 262.5 | 273.5 | 266.0 | 249.8 | 210.8 | 182.3 | 159.5 | 147.7 |
| 62.5°  | 138.5 | 161.7 | 195.5 | 229.7 | 234.0 | 226.6 | 212.6 | 181.0 | 156.5 | 138.5 | 129.7 |
| 65°    | 120.1 | 142.0 | 169.2 | 195.0 | 199.0 | 191.1 | 176.6 | 153.8 | 133.2 | 121.8 | 113.5 |
| 67.5°  | 102.1 | 119.6 | 143.8 | 162.6 | 164.8 | 157.3 | 145.5 | 127.1 | 114.4 | 102.1 | 96.0  |
| 70°    | 86.3  | 99.5  | 118.3 | 133.7 | 134.5 | 127.5 | 121.4 | 104.7 | 95.1  | 86.3  | 81.5  |
| 72.5°  | 71.0  | 80.2  | 94.7  | 106.1 | 106.5 | 102.1 | 96.4  | 85.9  | 77.6  | 71.4  | 66.6  |
| 75°    | 56.1  | 64.0  | 72.8  | 82.8  | 82.4  | 78.9  | 74.5  | 67.9  | 60.9  | 57.0  | 54.8  |
| 77.5°  | 43.0  | 47.8  | 54.8  | 61.4  | 61.4  | 59.6  | 57.0  | 52.2  | 47.8  | 43.8  | 41.6  |
| 80°    | 30.7  | 33.7  | 39.4  | 41.6  | 42.5  | 42.1  | 39.9  | 36.4  | 34.6  | 31.6  | 30.7  |
| 82.5°  | 19.7  | 21.9  | 24.5  | 26.7  | 28.0  | 27.2  | 26.7  | 25.0  | 22.4  | 21.5  | 20.6  |
| 85°    | 11.4  | 12.3  | 13.6  | 14.9  | 15.3  | 14.9  | 15.8  | 14.5  | 13.1  | 13.1  | 12.7  |
| 87.5°  | 4.8   | 5.3   | 6.1   | 6.1   | 6.6   | 6.6   | 6.1   | 6.6   | 6.6   | 6.1   | 5.7   |
| 90°    | 1.1   | 3.7   | 6.2   | 8.8   | 11.3  | 12.6  | 13.5  | 15.4  | 17.3  | 19.2  | 21.1  |
| 92.5°  | 26.3  | 25.4  | 24.4  | 23.5  | 22.6  | 22.1  | 22.5  | 23.2  | 23.9  | 24.6  | 25.3  |
| 95°    | 68.5  | 60.8  | 53.0  | 45.3  | 37.6  | 33.7  | 34.5  | 36.2  | 37.8  | 39.5  | 41.1  |
| 97.5°  | 123.2 | 104.0 | 84.8  | 65.7  | 46.5  | 36.9  | 38.8  | 42.5  | 46.2  | 50.0  | 53.7  |
| 100°   | 186.4 | 154.3 | 122.3 | 90.2  | 58.1  | 42.1  | 44.1  | 48.1  | 52.0  | 56.0  | 60.0  |
| 102.5° | 255.9 | 255.4 | 255.0 | 254.5 | 254.0 | 253.8 | 232.5 | 189.9 | 147.3 | 104.7 | 62.1  |
| 105°   | 320.2 | 327.2 | 334.2 | 341.3 | 348.3 | 351.8 | 319.9 | 256.0 | 192.1 | 128.2 | 64.3  |
| 107.5° | 395.0 | 400.8 | 406.7 | 412.5 | 418.4 | 421.3 | 381.9 | 303.0 | 224.1 | 145.3 | 66.4  |
| 110°   | 466.6 | 471.5 | 476.4 | 481.3 | 486.2 | 488.7 | 454.9 | 387.2 | 319.6 | 251.9 | 184.3 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 25°    | 30°    | 35°    | 40°    | 45°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 534.0  | 538.2  | 542.4  | 546.7  | 550.9  | 553.0  | 551.0  | 547.0  | 543.1  | 539.1  | 535.1  |
| 115°   | 605.6  | 609.6  | 613.6  | 617.5  | 621.5  | 623.5  | 626.4  | 632.3  | 638.2  | 644.0  | 649.9  |
| 117.5° | 667.8  | 672.5  | 677.2  | 681.9  | 686.6  | 688.9  | 690.9  | 694.9  | 698.8  | 702.8  | 706.8  |
| 120°   | 737.3  | 740.8  | 744.3  | 747.8  | 751.3  | 753.1  | 755.2  | 759.4  | 763.7  | 767.9  | 772.1  |
| 122.5° | 796.3  | 800.0  | 803.8  | 807.5  | 811.2  | 813.1  | 815.4  | 820.1  | 824.8  | 829.5  | 834.2  |
| 125°   | 856.3  | 859.3  | 862.4  | 865.4  | 868.5  | 870.0  | 872.2  | 876.7  | 881.1  | 885.6  | 890.0  |
| 127.5° | 911.1  | 914.4  | 917.6  | 920.9  | 924.2  | 925.8  | 927.6  | 931.1  | 934.6  | 938.1  | 941.6  |
| 130°   | 962.7  | 966.5  | 970.2  | 974.0  | 977.7  | 979.6  | 980.9  | 983.4  | 986.0  | 988.5  | 991.1  |
| 132.5° | 1015.4 | 1018.4 | 1021.5 | 1024.5 | 1027.6 | 1029.1 | 1030.4 | 1032.9 | 1035.5 | 1038.0 | 1040.6 |
| 135°   | 1059.6 | 1063.4 | 1067.1 | 1070.9 | 1074.6 | 1076.5 | 1077.5 | 1079.6 | 1081.7 | 1083.8 | 1085.9 |
| 137.5° | 1106.0 | 1108.8 | 1111.6 | 1114.4 | 1117.2 | 1118.6 | 1119.8 | 1122.1 | 1124.4 | 1126.8 | 1129.1 |
| 140°   | 1151.2 | 1153.1 | 1155.0 | 1156.9 | 1158.8 | 1159.7 | 1161.0 | 1163.6 | 1166.1 | 1168.7 | 1171.3 |
| 142.5° | 1189.2 | 1190.8 | 1192.4 | 1194.1 | 1195.7 | 1196.5 | 1198.0 | 1201.1 | 1204.1 | 1207.2 | 1210.2 |
| 145°   | 1229.2 | 1229.0 | 1228.7 | 1228.5 | 1228.2 | 1228.1 | 1230.1 | 1234.1 | 1238.0 | 1242.0 | 1246.0 |
| 147.5° | 1263.9 | 1263.2 | 1262.5 | 1261.8 | 1261.1 | 1260.8 | 1262.8 | 1266.8 | 1270.7 | 1274.7 | 1278.7 |
| 150°   | 1297.7 | 1296.1 | 1294.4 | 1292.8 | 1291.1 | 1290.3 | 1292.2 | 1295.9 | 1299.6 | 1303.4 | 1307.1 |
| 152.5° | 1326.1 | 1324.2 | 1322.4 | 1320.5 | 1318.6 | 1317.7 | 1319.5 | 1323.0 | 1326.5 | 1330.0 | 1333.5 |
| 155°   | 1353.5 | 1351.4 | 1349.3 | 1347.2 | 1345.1 | 1344.0 | 1345.4 | 1348.2 | 1351.0 | 1353.8 | 1356.6 |
| 157.5° | 1375.6 | 1373.7 | 1371.9 | 1370.0 | 1368.1 | 1367.2 | 1368.2 | 1370.3 | 1372.4 | 1374.5 | 1376.6 |
| 160°   | 1394.6 | 1393.2 | 1391.8 | 1390.3 | 1388.9 | 1388.2 | 1388.9 | 1390.3 | 1391.8 | 1393.2 | 1394.6 |
| 162.5° | 1411.4 | 1410.0 | 1408.6 | 1407.2 | 1405.8 | 1405.1 | 1405.7 | 1406.9 | 1408.0 | 1409.2 | 1410.4 |
| 165°   | 1426.2 | 1424.8 | 1423.4 | 1421.9 | 1420.5 | 1419.8 | 1420.2 | 1420.9 | 1421.6 | 1422.3 | 1423.0 |
| 167.5° | 1437.7 | 1436.3 | 1434.9 | 1433.5 | 1432.1 | 1431.4 | 1431.8 | 1432.5 | 1433.2 | 1433.9 | 1434.6 |
| 170°   | 1447.2 | 1445.8 | 1444.4 | 1443.0 | 1441.6 | 1440.9 | 1441.1 | 1441.6 | 1442.1 | 1442.5 | 1443.0 |
| 172.5° | 1453.5 | 1452.1 | 1450.7 | 1449.3 | 1447.9 | 1447.2 | 1447.4 | 1447.9 | 1448.4 | 1448.8 | 1449.3 |
| 175°   | 1458.8 | 1457.2 | 1455.5 | 1453.9 | 1452.2 | 1451.4 | 1451.6 | 1452.1 | 1452.6 | 1453.0 | 1453.5 |
| 177.5° | 1460.9 | 1459.3 | 1457.6 | 1456.0 | 1454.3 | 1453.5 | 1453.6 | 1453.9 | 1454.1 | 1454.4 | 1454.6 |
| 180°   | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 |

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**CANDELA DISTRIBUTION (continued):**

|        | 50°   | 55°   | 60°   | 65°   | 67.5° | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 |
| 2.5°   | 592.5 | 593.0 | 593.9 | 598.2 | 600.4 | 600.9 | 599.1 | 603.1 | 604.4 | 603.1 | 602.2 |
| 5°     | 620.6 | 623.2 | 628.5 | 634.2 | 633.7 | 634.2 | 636.8 | 639.4 | 640.3 | 636.8 | 638.1 |
| 7.5°   | 645.1 | 650.4 | 656.1 | 664.8 | 664.8 | 669.2 | 671.0 | 673.2 | 678.4 | 675.8 | 674.9 |
| 10°    | 673.2 | 680.2 | 690.7 | 704.7 | 705.2 | 709.6 | 713.9 | 720.9 | 723.1 | 721.4 | 722.3 |
| 12.5°  | 708.2 | 721.8 | 722.7 | 738.0 | 745.1 | 745.9 | 752.9 | 751.6 | 756.0 | 756.0 | 763.5 |
| 15°    | 723.6 | 744.6 | 756.4 | 771.3 | 775.7 | 770.5 | 776.2 | 782.3 | 782.7 | 782.7 | 782.3 |
| 17.5°  | 751.2 | 759.5 | 771.3 | 779.2 | 781.0 | 781.0 | 781.4 | 784.1 | 782.3 | 778.8 | 781.4 |
| 20°    | 756.9 | 760.4 | 764.8 | 763.9 | 764.8 | 760.4 | 756.0 | 751.6 | 752.1 | 749.9 | 756.4 |
| 22.5°  | 746.4 | 745.5 | 735.4 | 728.8 | 728.8 | 720.1 | 711.7 | 707.8 | 703.9 | 705.2 | 707.4 |
| 25°    | 720.1 | 706.5 | 694.2 | 684.6 | 682.4 | 668.4 | 657.0 | 653.5 | 646.9 | 652.1 | 653.0 |
| 27.5°  | 678.0 | 662.7 | 642.9 | 634.6 | 623.2 | 617.5 | 609.6 | 599.1 | 585.5 | 593.4 | 592.1 |
| 30°    | 632.9 | 610.1 | 593.9 | 573.7 | 555.7 | 554.4 | 539.5 | 522.0 | 515.0 | 515.0 | 518.9 |
| 32.5°  | 582.5 | 552.2 | 528.5 | 500.1 | 482.5 | 475.1 | 457.1 | 439.6 | 443.5 | 430.4 | 435.2 |
| 35°    | 523.7 | 483.8 | 454.0 | 426.4 | 413.3 | 404.5 | 381.3 | 371.6 | 361.1 | 355.0 | 366.4 |
| 37.5°  | 467.6 | 421.6 | 383.5 | 353.2 | 348.4 | 332.6 | 316.9 | 310.7 | 304.6 | 307.2 | 306.8 |
| 40°    | 399.3 | 358.5 | 324.3 | 300.7 | 292.3 | 284.9 | 274.4 | 266.9 | 263.0 | 265.2 | 265.6 |
| 42.5°  | 337.5 | 303.3 | 277.9 | 261.2 | 254.2 | 248.9 | 243.7 | 237.5 | 236.2 | 236.2 | 238.0 |
| 45°    | 289.7 | 261.6 | 244.6 | 231.0 | 227.0 | 223.1 | 219.1 | 216.5 | 215.6 | 213.9 | 215.2 |
| 47.5°  | 251.6 | 229.2 | 218.7 | 208.6 | 204.2 | 203.4 | 199.8 | 198.5 | 196.8 | 196.3 | 196.8 |
| 50°    | 219.6 | 205.5 | 195.9 | 190.2 | 187.1 | 185.8 | 184.1 | 181.4 | 180.6 | 182.8 | 181.9 |
| 52.5°  | 197.2 | 184.1 | 178.8 | 173.1 | 171.4 | 169.6 | 167.0 | 167.4 | 167.0 | 166.1 | 166.1 |
| 55°    | 174.9 | 166.5 | 161.3 | 156.9 | 156.5 | 154.7 | 152.5 | 151.6 | 151.2 | 150.3 | 151.6 |
| 57.5°  | 156.9 | 150.3 | 145.5 | 141.6 | 139.8 | 139.8 | 137.6 | 135.9 | 135.9 | 135.4 | 135.9 |
| 60°    | 138.9 | 132.4 | 129.3 | 125.3 | 124.0 | 123.6 | 122.3 | 121.4 | 120.1 | 120.1 | 120.1 |
| 62.5°  | 122.3 | 117.0 | 113.5 | 110.0 | 110.4 | 108.3 | 106.5 | 105.6 | 105.6 | 106.1 | 106.1 |
| 65°    | 106.5 | 103.0 | 98.6  | 95.5  | 94.7  | 94.2  | 93.4  | 92.9  | 91.6  | 92.5  | 92.5  |
| 67.5°  | 92.0  | 87.2  | 84.6  | 83.3  | 82.0  | 81.5  | 80.6  | 79.8  | 79.3  | 78.9  | 79.8  |
| 70°    | 77.6  | 73.6  | 71.4  | 70.6  | 69.2  | 68.8  | 68.4  | 67.1  | 67.5  | 67.9  | 68.4  |
| 72.5°  | 64.4  | 60.9  | 60.5  | 57.9  | 57.9  | 57.9  | 56.1  | 57.0  | 56.5  | 55.7  | 56.5  |
| 75°    | 50.8  | 49.1  | 48.2  | 46.9  | 47.3  | 46.9  | 46.5  | 45.1  | 45.1  | 45.6  | 46.0  |
| 77.5°  | 40.3  | 38.6  | 38.1  | 36.8  | 35.9  | 36.8  | 35.9  | 35.5  | 35.5  | 35.9  | 35.9  |
| 80°    | 29.8  | 28.9  | 27.6  | 27.6  | 27.6  | 27.2  | 27.2  | 27.2  | 26.7  | 26.3  | 26.7  |
| 82.5°  | 19.7  | 19.7  | 19.3  | 18.8  | 19.3  | 18.4  | 18.8  | 18.8  | 18.8  | 18.8  | 18.8  |
| 85°    | 12.7  | 12.3  | 12.3  | 11.8  | 11.8  | 11.8  | 12.3  | 11.4  | 11.4  | 11.8  | 11.8  |
| 87.5°  | 5.7   | 5.7   | 5.7   | 6.1   | 5.7   | 5.7   | 5.7   | 6.1   | 5.7   | 5.7   | 5.7   |
| 90°    | 22.3  | 23.4  | 24.6  | 25.7  | 26.3  | 26.5  | 27.0  | 27.5  | 27.9  | 28.4  | 27.9  |
| 92.5°  | 25.8  | 26.2  | 26.7  | 27.2  | 27.4  | 27.5  | 27.7  | 28.0  | 28.2  | 28.4  | 28.2  |
| 95°    | 42.3  | 43.4  | 44.6  | 45.7  | 46.3  | 46.2  | 46.0  | 45.7  | 45.5  | 45.3  | 45.5  |
| 97.5°  | 54.4  | 55.1  | 55.8  | 56.5  | 56.9  | 57.0  | 57.2  | 57.5  | 57.7  | 57.9  | 57.7  |
| 100°   | 61.9  | 63.8  | 65.7  | 67.6  | 68.5  | 68.7  | 69.2  | 69.7  | 70.1  | 70.6  | 70.1  |
| 102.5° | 64.7  | 67.3  | 69.8  | 72.4  | 73.7  | 74.1  | 74.8  | 75.5  | 76.2  | 76.9  | 76.2  |
| 105°   | 66.9  | 69.4  | 72.0  | 74.5  | 75.8  | 76.3  | 77.2  | 78.1  | 79.1  | 80.0  | 79.1  |
| 107.5° | 69.0  | 71.5  | 74.1  | 76.6  | 77.9  | 78.4  | 79.3  | 80.3  | 81.2  | 82.2  | 81.2  |
| 110°   | 160.9 | 137.5 | 114.1 | 90.7  | 79.0  | 79.5  | 80.4  | 81.3  | 82.3  | 83.2  | 82.3  |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 50°    | 55°    | 60°    | 65°    | 67.5°  | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 434.2  | 333.3  | 232.4  | 131.5  | 81.1   | 81.5   | 82.2   | 82.9   | 83.6   | 84.3   | 83.6   |
| 115°   | 541.5  | 433.1  | 324.8  | 216.4  | 162.2  | 153.8  | 136.9  | 120.1  | 103.2  | 86.4   | 103.2  |
| 117.5° | 673.3  | 639.8  | 606.3  | 572.8  | 556.1  | 525.4  | 464.1  | 402.8  | 341.5  | 280.2  | 341.5  |
| 120°   | 774.9  | 777.7  | 780.5  | 783.3  | 784.7  | 768.9  | 737.3  | 705.7  | 674.1  | 642.5  | 674.1  |
| 122.5° | 835.6  | 837.0  | 838.4  | 839.8  | 840.5  | 840.6  | 840.9  | 841.1  | 841.4  | 841.6  | 841.4  |
| 125°   | 891.6  | 893.3  | 894.9  | 896.6  | 897.4  | 897.8  | 898.5  | 899.2  | 899.9  | 900.6  | 899.9  |
| 127.5° | 944.0  | 946.3  | 948.7  | 951.0  | 952.2  | 952.3  | 952.5  | 952.8  | 953.0  | 953.2  | 953.0  |
| 130°   | 993.7  | 996.3  | 998.8  | 1001.4 | 1002.7 | 1002.6 | 1002.4 | 1002.1 | 1001.9 | 1001.7 | 1001.9 |
| 132.5° | 1042.7 | 1044.8 | 1046.9 | 1049.0 | 1050.1 | 1050.0 | 1049.8 | 1049.5 | 1049.3 | 1049.1 | 1049.3 |
| 135°   | 1088.3 | 1090.6 | 1093.0 | 1095.3 | 1096.5 | 1096.3 | 1095.8 | 1095.3 | 1094.9 | 1094.4 | 1094.9 |
| 137.5° | 1131.5 | 1133.8 | 1136.2 | 1138.5 | 1139.7 | 1139.3 | 1138.6 | 1137.9 | 1137.2 | 1136.5 | 1137.2 |
| 140°   | 1173.4 | 1175.5 | 1177.6 | 1179.7 | 1180.7 | 1180.1 | 1179.0 | 1177.8 | 1176.7 | 1175.5 | 1176.7 |
| 142.5° | 1212.1 | 1214.0 | 1215.9 | 1217.8 | 1218.7 | 1218.1 | 1216.9 | 1215.8 | 1214.6 | 1213.4 | 1214.6 |
| 145°   | 1247.6 | 1249.3 | 1250.9 | 1252.6 | 1253.4 | 1252.8 | 1251.6 | 1250.5 | 1249.3 | 1248.1 | 1249.3 |
| 147.5° | 1279.9 | 1281.1 | 1282.2 | 1283.4 | 1284.0 | 1283.5 | 1282.6 | 1281.6 | 1280.7 | 1279.7 | 1280.7 |
| 150°   | 1308.5 | 1309.9 | 1311.4 | 1312.8 | 1313.5 | 1312.9 | 1311.7 | 1310.6 | 1309.4 | 1308.2 | 1309.4 |
| 152.5° | 1334.9 | 1336.3 | 1337.7 | 1339.1 | 1339.8 | 1339.0 | 1337.3 | 1335.7 | 1334.0 | 1332.4 | 1334.0 |
| 155°   | 1358.0 | 1359.4 | 1360.9 | 1362.3 | 1363.0 | 1362.1 | 1360.2 | 1358.3 | 1356.4 | 1354.5 | 1356.4 |
| 157.5° | 1378.2 | 1379.9 | 1381.5 | 1383.2 | 1384.0 | 1383.1 | 1381.2 | 1379.3 | 1377.5 | 1375.6 | 1377.5 |
| 160°   | 1396.0 | 1397.4 | 1398.8 | 1400.2 | 1400.9 | 1400.1 | 1398.4 | 1396.8 | 1395.1 | 1393.5 | 1395.1 |
| 162.5° | 1412.0 | 1413.6 | 1415.3 | 1416.9 | 1417.7 | 1416.6 | 1414.5 | 1412.4 | 1410.3 | 1408.2 | 1410.3 |
| 165°   | 1424.6 | 1426.3 | 1427.9 | 1429.6 | 1430.4 | 1429.6 | 1427.9 | 1426.3 | 1424.6 | 1423.0 | 1424.6 |
| 167.5° | 1436.2 | 1437.9 | 1439.5 | 1441.2 | 1442.0 | 1440.9 | 1438.8 | 1436.7 | 1434.6 | 1432.5 | 1434.6 |
| 170°   | 1444.6 | 1446.3 | 1447.9 | 1449.6 | 1450.4 | 1449.3 | 1447.2 | 1445.1 | 1443.0 | 1440.9 | 1443.0 |
| 172.5° | 1450.9 | 1452.6 | 1454.2 | 1455.9 | 1456.7 | 1455.6 | 1453.5 | 1451.4 | 1449.3 | 1447.2 | 1449.3 |
| 175°   | 1455.1 | 1456.8 | 1458.4 | 1460.1 | 1460.9 | 1459.7 | 1457.4 | 1455.1 | 1452.7 | 1450.4 | 1452.7 |
| 177.5° | 1456.2 | 1457.9 | 1459.5 | 1461.2 | 1462.0 | 1460.9 | 1458.8 | 1456.7 | 1454.6 | 1452.5 | 1454.6 |
| 180°   | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 100°  | 105°  | 110°  | 112.5° | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  |
|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 570.2 | 570.2 | 570.2 | 570.2  | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 |
| 2.5°   | 604.4 | 601.3 | 598.7 | 599.1  | 601.3 | 599.5 | 595.2 | 589.5 | 587.3 | 584.6 | 587.3 |
| 5°     | 640.7 | 638.1 | 632.9 | 633.3  | 632.0 | 630.2 | 623.2 | 614.4 | 614.4 | 607.4 | 606.6 |
| 7.5°   | 676.7 | 672.7 | 669.2 | 668.4  | 663.5 | 660.0 | 653.9 | 641.6 | 636.8 | 628.5 | 623.7 |
| 10°    | 717.0 | 713.9 | 710.0 | 705.2  | 702.5 | 696.4 | 686.3 | 668.4 | 659.6 | 648.2 | 639.9 |
| 12.5°  | 757.8 | 757.3 | 748.6 | 738.9  | 738.5 | 728.8 | 721.8 | 697.7 | 685.9 | 670.5 | 650.8 |
| 15°    | 783.6 | 781.4 | 776.6 | 771.8  | 773.1 | 762.6 | 746.8 | 718.3 | 710.4 | 692.0 | 671.0 |
| 17.5°  | 783.2 | 783.2 | 781.9 | 781.0  | 779.7 | 776.6 | 767.8 | 749.0 | 736.3 | 713.1 | 693.3 |
| 20°    | 758.2 | 763.9 | 765.2 | 764.8  | 769.2 | 771.3 | 770.9 | 759.1 | 749.0 | 728.4 | 708.2 |
| 22.5°  | 708.2 | 721.4 | 727.1 | 730.6  | 739.8 | 744.6 | 756.0 | 751.6 | 749.0 | 733.7 | 716.6 |
| 25°    | 661.8 | 666.2 | 683.3 | 684.1  | 696.8 | 708.7 | 720.1 | 727.5 | 737.2 | 731.5 | 717.0 |
| 27.5°  | 601.7 | 611.8 | 624.1 | 633.3  | 635.9 | 660.0 | 678.9 | 692.9 | 714.8 | 716.6 | 711.7 |
| 30°    | 533.8 | 538.6 | 558.8 | 571.1  | 585.1 | 602.6 | 629.8 | 653.9 | 673.6 | 691.6 | 697.7 |
| 32.5°  | 451.0 | 470.7 | 482.5 | 497.4  | 509.7 | 540.8 | 574.1 | 605.2 | 628.0 | 658.3 | 671.4 |
| 35°    | 375.2 | 390.5 | 410.7 | 416.8  | 439.1 | 465.4 | 508.8 | 548.7 | 583.3 | 614.0 | 640.7 |
| 37.5°  | 312.5 | 324.8 | 346.2 | 355.9  | 369.0 | 402.8 | 439.1 | 488.7 | 530.3 | 568.0 | 601.3 |
| 40°    | 269.5 | 278.7 | 295.0 | 298.0  | 309.0 | 339.7 | 369.0 | 415.5 | 470.7 | 521.5 | 557.9 |
| 42.5°  | 240.2 | 244.6 | 255.5 | 259.5  | 266.5 | 287.1 | 313.4 | 357.2 | 408.5 | 461.1 | 512.3 |
| 45°    | 219.1 | 222.2 | 228.8 | 232.3  | 241.0 | 250.2 | 271.7 | 306.8 | 347.1 | 400.1 | 455.4 |
| 47.5°  | 200.3 | 204.2 | 206.9 | 209.1  | 213.9 | 224.0 | 238.0 | 263.8 | 302.4 | 351.1 | 404.5 |
| 50°    | 184.5 | 185.8 | 190.6 | 191.1  | 194.2 | 200.7 | 213.9 | 229.7 | 260.3 | 299.8 | 351.5 |
| 52.5°  | 168.7 | 170.0 | 173.1 | 176.2  | 177.5 | 182.8 | 191.5 | 204.7 | 227.5 | 258.6 | 304.6 |
| 55°    | 153.0 | 154.7 | 157.8 | 160.0  | 161.3 | 165.7 | 170.9 | 183.6 | 201.6 | 223.5 | 261.2 |
| 57.5°  | 137.2 | 141.1 | 142.0 | 143.3  | 145.5 | 150.3 | 155.1 | 162.6 | 176.6 | 196.8 | 224.4 |
| 60°    | 122.3 | 123.6 | 126.7 | 128.0  | 130.2 | 132.8 | 138.9 | 144.6 | 154.7 | 170.5 | 195.5 |
| 62.5°  | 106.9 | 110.0 | 111.3 | 112.6  | 114.4 | 117.5 | 121.4 | 127.5 | 136.3 | 149.0 | 168.7 |
| 65°    | 93.8  | 94.2  | 96.9  | 98.6   | 100.4 | 102.6 | 106.5 | 112.2 | 117.5 | 129.3 | 143.8 |
| 67.5°  | 81.1  | 82.0  | 82.8  | 84.6   | 86.8  | 89.0  | 92.5  | 95.5  | 102.1 | 110.0 | 121.4 |
| 70°    | 68.8  | 68.8  | 71.0  | 72.3   | 71.9  | 74.5  | 77.1  | 80.6  | 85.5  | 92.9  | 102.1 |
| 72.5°  | 57.9  | 57.4  | 59.2  | 59.6   | 60.5  | 62.2  | 64.0  | 67.5  | 70.1  | 75.8  | 82.8  |
| 75°    | 46.0  | 46.9  | 47.8  | 47.8   | 49.1  | 50.4  | 52.2  | 53.9  | 57.0  | 60.5  | 65.7  |
| 77.5°  | 36.4  | 36.4  | 37.3  | 37.7   | 39.0  | 38.6  | 40.3  | 42.1  | 44.3  | 47.3  | 51.3  |
| 80°    | 26.7  | 27.6  | 27.6  | 27.6   | 28.0  | 28.5  | 30.2  | 31.6  | 32.9  | 35.1  | 36.8  |
| 82.5°  | 18.8  | 18.8  | 19.7  | 19.7   | 19.7  | 20.6  | 20.6  | 21.0  | 21.9  | 23.2  | 24.5  |
| 85°    | 11.8  | 11.8  | 11.8  | 12.3   | 11.8  | 12.3  | 13.1  | 12.7  | 13.1  | 14.0  | 14.0  |
| 87.5°  | 5.7   | 5.7   | 5.7   | 5.7    | 5.7   | 6.1   | 5.7   | 6.1   | 6.6   | 6.6   | 6.6   |
| 90°    | 27.5  | 27.0  | 26.5  | 26.3   | 25.7  | 24.6  | 23.4  | 22.3  | 21.1  | 19.2  | 17.3  |
| 92.5°  | 28.0  | 27.7  | 27.5  | 27.4   | 27.2  | 26.7  | 26.2  | 25.8  | 25.3  | 24.6  | 23.9  |
| 95°    | 45.7  | 46.0  | 46.2  | 46.3   | 45.7  | 44.6  | 43.4  | 42.3  | 41.1  | 39.5  | 37.8  |
| 97.5°  | 57.5  | 57.2  | 57.0  | 56.9   | 56.5  | 55.8  | 55.1  | 54.4  | 53.7  | 50.0  | 46.2  |
| 100°   | 69.7  | 69.2  | 68.7  | 68.5   | 67.6  | 65.7  | 63.8  | 61.9  | 60.0  | 56.0  | 52.0  |
| 102.5° | 75.5  | 74.8  | 74.1  | 73.7   | 72.4  | 69.8  | 67.3  | 64.7  | 62.1  | 104.7 | 147.3 |
| 105°   | 78.1  | 77.2  | 76.3  | 75.8   | 74.5  | 72.0  | 69.4  | 66.9  | 64.3  | 128.2 | 192.1 |
| 107.5° | 80.3  | 79.3  | 78.4  | 77.9   | 76.6  | 74.1  | 71.5  | 69.0  | 66.4  | 145.3 | 224.1 |
| 110°   | 81.3  | 80.4  | 79.5  | 79.0   | 90.7  | 114.1 | 137.5 | 160.9 | 184.3 | 251.9 | 319.6 |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 100°   | 105°   | 110°   | 112.5° | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 82.9   | 82.2   | 81.5   | 81.1   | 131.5  | 232.4  | 333.3  | 434.2  | 535.1  | 539.1  | 543.1  |
| 115°   | 120.1  | 136.9  | 153.8  | 162.2  | 216.4  | 324.8  | 433.1  | 541.5  | 649.9  | 644.0  | 638.2  |
| 117.5° | 402.8  | 464.1  | 525.4  | 556.1  | 572.8  | 606.3  | 639.8  | 673.3  | 706.8  | 702.8  | 698.8  |
| 120°   | 705.7  | 737.3  | 768.9  | 784.7  | 783.3  | 780.5  | 777.7  | 774.9  | 772.1  | 767.9  | 763.7  |
| 122.5° | 841.1  | 840.9  | 840.6  | 840.5  | 839.8  | 838.4  | 837.0  | 835.6  | 834.2  | 829.5  | 824.8  |
| 125°   | 899.2  | 898.5  | 897.8  | 897.4  | 896.6  | 894.9  | 893.3  | 891.6  | 890.0  | 885.6  | 881.1  |
| 127.5° | 952.8  | 952.5  | 952.3  | 952.2  | 951.0  | 948.7  | 946.3  | 944.0  | 941.6  | 938.1  | 934.6  |
| 130°   | 1002.1 | 1002.4 | 1002.6 | 1002.7 | 1001.4 | 998.8  | 996.3  | 993.7  | 991.1  | 988.5  | 986.0  |
| 132.5° | 1049.5 | 1049.8 | 1050.0 | 1050.1 | 1049.0 | 1046.9 | 1044.8 | 1042.7 | 1040.6 | 1038.0 | 1035.5 |
| 135°   | 1095.3 | 1095.8 | 1096.3 | 1096.5 | 1095.3 | 1093.0 | 1090.6 | 1088.3 | 1085.9 | 1083.8 | 1081.7 |
| 137.5° | 1137.9 | 1138.6 | 1139.3 | 1139.7 | 1138.5 | 1136.2 | 1133.8 | 1131.5 | 1129.1 | 1126.8 | 1124.4 |
| 140°   | 1177.8 | 1179.0 | 1180.1 | 1180.7 | 1179.7 | 1177.6 | 1175.5 | 1173.4 | 1171.3 | 1168.7 | 1166.1 |
| 142.5° | 1215.8 | 1216.9 | 1218.1 | 1218.7 | 1217.8 | 1215.9 | 1214.0 | 1212.1 | 1210.2 | 1207.2 | 1204.1 |
| 145°   | 1250.5 | 1251.6 | 1252.8 | 1253.4 | 1252.6 | 1250.9 | 1249.3 | 1247.6 | 1246.0 | 1242.0 | 1238.0 |
| 147.5° | 1281.6 | 1282.6 | 1283.5 | 1284.0 | 1283.4 | 1282.2 | 1281.1 | 1279.9 | 1278.7 | 1274.7 | 1270.7 |
| 150°   | 1310.6 | 1311.7 | 1312.9 | 1313.5 | 1312.8 | 1311.4 | 1309.9 | 1308.5 | 1307.1 | 1303.4 | 1299.6 |
| 152.5° | 1335.7 | 1337.3 | 1339.0 | 1339.8 | 1339.1 | 1337.7 | 1336.3 | 1334.9 | 1333.5 | 1330.0 | 1326.5 |
| 155°   | 1358.3 | 1360.2 | 1362.1 | 1363.0 | 1362.3 | 1360.9 | 1359.4 | 1358.0 | 1356.6 | 1353.8 | 1351.0 |
| 157.5° | 1379.3 | 1381.2 | 1383.1 | 1384.0 | 1383.2 | 1381.5 | 1379.9 | 1378.2 | 1376.6 | 1374.5 | 1372.4 |
| 160°   | 1396.8 | 1398.4 | 1400.1 | 1400.9 | 1400.2 | 1398.8 | 1397.4 | 1396.0 | 1394.6 | 1393.2 | 1391.8 |
| 162.5° | 1412.4 | 1414.5 | 1416.6 | 1417.7 | 1416.9 | 1415.3 | 1413.6 | 1412.0 | 1410.4 | 1409.2 | 1408.0 |
| 165°   | 1426.3 | 1427.9 | 1429.6 | 1430.4 | 1429.6 | 1427.9 | 1426.3 | 1424.6 | 1423.0 | 1422.3 | 1421.6 |
| 167.5° | 1436.7 | 1438.8 | 1440.9 | 1442.0 | 1441.2 | 1439.5 | 1437.9 | 1436.2 | 1434.6 | 1433.9 | 1433.2 |
| 170°   | 1445.1 | 1447.2 | 1449.3 | 1450.4 | 1449.6 | 1447.9 | 1446.3 | 1444.6 | 1443.0 | 1442.5 | 1442.1 |
| 172.5° | 1451.4 | 1453.5 | 1455.6 | 1456.7 | 1455.9 | 1454.2 | 1452.6 | 1450.9 | 1449.3 | 1448.8 | 1448.4 |
| 175°   | 1455.1 | 1457.4 | 1459.7 | 1460.9 | 1460.1 | 1458.4 | 1456.8 | 1455.1 | 1453.5 | 1453.0 | 1452.6 |
| 177.5° | 1456.7 | 1458.8 | 1460.9 | 1462.0 | 1461.2 | 1459.5 | 1457.9 | 1456.2 | 1454.6 | 1454.4 | 1454.1 |
| 180°   | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 150°  | 155°  | 157.5° | 160°  | 165°  | 170°  | 175°  | 180°  | 185°  | 190°  | 195°  |
|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 570.2 | 570.2 | 570.2  | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 |
| 2.5°   | 585.1 | 582.9 | 581.6  | 582.5 | 579.8 | 573.3 | 573.3 | 575.4 | 572.8 | 570.2 | 566.2 |
| 5°     | 601.3 | 596.9 | 594.3  | 593.9 | 587.7 | 577.2 | 575.0 | 572.8 | 567.1 | 561.0 | 554.4 |
| 7.5°   | 617.1 | 609.2 | 604.8  | 601.7 | 593.0 | 579.4 | 573.7 | 568.9 | 559.7 | 550.5 | 542.1 |
| 10°    | 630.2 | 618.8 | 613.6  | 608.8 | 597.4 | 580.3 | 571.1 | 562.3 | 550.5 | 538.6 | 528.1 |
| 12.5°  | 640.7 | 627.6 | 621.0  | 614.0 | 600.0 | 577.6 | 566.2 | 552.2 | 540.4 | 524.6 | 514.1 |
| 15°    | 658.3 | 631.1 | 625.0  | 618.4 | 603.9 | 573.3 | 559.2 | 543.4 | 527.2 | 506.2 | 494.8 |
| 17.5°  | 672.3 | 635.9 | 635.5  | 621.5 | 602.6 | 571.5 | 550.0 | 529.4 | 511.9 | 490.9 | 472.9 |
| 20°    | 680.6 | 643.4 | 636.4  | 621.9 | 598.2 | 559.7 | 537.3 | 514.5 | 495.7 | 470.3 | 452.3 |
| 22.5°  | 687.6 | 653.9 | 635.5  | 618.0 | 589.0 | 555.7 | 522.9 | 501.4 | 475.5 | 447.9 | 430.8 |
| 25°    | 690.3 | 656.1 | 636.8  | 616.6 | 582.5 | 544.3 | 507.1 | 483.8 | 454.9 | 429.9 | 406.7 |
| 27.5°  | 690.7 | 655.6 | 632.0  | 610.9 | 573.3 | 529.4 | 491.3 | 466.8 | 434.8 | 405.8 | 382.6 |
| 30°    | 686.3 | 650.8 | 629.4  | 606.6 | 564.5 | 515.8 | 472.0 | 444.8 | 410.7 | 381.7 | 357.6 |
| 32.5°  | 673.2 | 641.2 | 623.7  | 598.7 | 553.1 | 497.0 | 453.6 | 423.4 | 387.4 | 358.9 | 335.7 |
| 35°    | 651.3 | 629.4 | 610.1  | 586.8 | 538.2 | 479.5 | 435.2 | 399.7 | 363.3 | 336.2 | 314.2 |
| 37.5°  | 624.1 | 612.3 | 594.3  | 571.5 | 521.1 | 463.7 | 414.6 | 375.2 | 338.8 | 312.5 | 291.0 |
| 40°    | 587.3 | 590.3 | 572.8  | 552.2 | 500.9 | 442.2 | 387.9 | 350.2 | 316.0 | 291.4 | 270.4 |
| 42.5°  | 547.4 | 560.1 | 550.0  | 530.3 | 478.6 | 418.5 | 368.1 | 326.5 | 293.2 | 267.8 | 250.2 |
| 45°    | 504.4 | 526.4 | 520.2  | 505.8 | 455.4 | 393.6 | 340.1 | 299.8 | 270.4 | 245.9 | 230.5 |
| 47.5°  | 457.5 | 488.7 | 488.7  | 478.1 | 429.5 | 368.6 | 316.0 | 274.8 | 245.9 | 228.3 | 213.4 |
| 50°    | 409.8 | 444.8 | 450.5  | 443.5 | 400.6 | 340.1 | 286.6 | 249.4 | 224.4 | 207.3 | 196.3 |
| 52.5°  | 359.8 | 400.6 | 411.1  | 407.6 | 369.9 | 312.9 | 262.5 | 226.1 | 203.4 | 188.5 | 178.8 |
| 55°    | 312.0 | 359.4 | 370.8  | 372.1 | 337.0 | 283.1 | 235.8 | 203.8 | 181.9 | 171.8 | 163.5 |
| 57.5°  | 266.9 | 312.5 | 325.2  | 327.4 | 303.7 | 255.9 | 210.8 | 182.8 | 163.0 | 154.7 | 148.1 |
| 60°    | 228.3 | 266.5 | 283.1  | 287.9 | 267.3 | 224.4 | 187.6 | 160.4 | 145.5 | 137.6 | 131.5 |
| 62.5°  | 196.8 | 227.5 | 245.0  | 246.3 | 237.1 | 196.8 | 163.5 | 140.7 | 128.0 | 121.0 | 117.9 |
| 65°    | 166.1 | 193.7 | 204.2  | 209.5 | 202.0 | 170.5 | 141.1 | 122.3 | 112.2 | 106.1 | 103.0 |
| 67.5°  | 141.6 | 159.1 | 167.9  | 174.9 | 167.4 | 143.8 | 120.1 | 104.7 | 97.3  | 91.2  | 89.4  |
| 70°    | 116.1 | 130.6 | 137.2  | 144.2 | 137.6 | 119.6 | 102.6 | 88.5  | 82.0  | 77.1  | 74.9  |
| 72.5°  | 92.9  | 104.3 | 110.4  | 114.8 | 110.9 | 96.0  | 82.0  | 72.3  | 67.5  | 64.0  | 62.7  |
| 75°    | 73.6  | 81.5  | 85.0   | 88.1  | 86.3  | 74.9  | 66.2  | 58.3  | 53.9  | 50.8  | 50.0  |
| 77.5°  | 56.1  | 61.8  | 65.7   | 66.6  | 64.4  | 57.0  | 49.5  | 44.7  | 41.2  | 39.4  | 38.6  |
| 80°    | 39.9  | 43.4  | 45.6   | 46.9  | 44.7  | 41.6  | 36.4  | 32.9  | 29.8  | 27.6  | 27.2  |
| 82.5°  | 26.7  | 28.5  | 30.2   | 29.8  | 28.9  | 26.3  | 23.2  | 21.5  | 20.2  | 18.4  | 18.4  |
| 85°    | 15.3  | 15.8  | 16.7   | 17.1  | 16.7  | 14.9  | 13.1  | 12.3  | 11.4  | 10.1  | 10.1  |
| 87.5°  | 6.6   | 7.0   | 7.0    | 7.5   | 6.6   | 6.6   | 5.7   | 4.8   | 4.8   | 4.4   | 3.9   |
| 90°    | 15.4  | 13.5  | 12.6   | 11.3  | 8.8   | 6.2   | 3.7   | 1.1   | 3.7   | 6.2   | 8.8   |
| 92.5°  | 23.2  | 22.5  | 22.1   | 22.6  | 23.5  | 24.4  | 25.4  | 26.3  | 25.4  | 24.4  | 23.5  |
| 95°    | 36.2  | 34.5  | 33.7   | 37.6  | 45.3  | 53.0  | 60.8  | 68.5  | 60.8  | 53.0  | 45.3  |
| 97.5°  | 42.5  | 38.8  | 36.9   | 46.5  | 65.7  | 84.8  | 104.0 | 123.2 | 104.0 | 84.8  | 65.7  |
| 100°   | 48.1  | 44.1  | 42.1   | 58.1  | 90.2  | 122.3 | 154.3 | 186.4 | 154.3 | 122.3 | 90.2  |
| 102.5° | 189.9 | 232.5 | 253.8  | 254.0 | 254.5 | 255.0 | 255.4 | 255.9 | 255.4 | 255.0 | 254.5 |
| 105°   | 256.0 | 319.9 | 351.8  | 348.3 | 341.3 | 334.2 | 327.2 | 320.2 | 327.2 | 334.2 | 341.3 |
| 107.5° | 303.0 | 381.9 | 421.3  | 418.4 | 412.5 | 406.7 | 400.8 | 395.0 | 400.8 | 406.7 | 412.5 |
| 110°   | 387.2 | 454.9 | 488.7  | 486.2 | 481.3 | 476.4 | 471.5 | 466.6 | 471.5 | 476.4 | 481.3 |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 150°   | 155°   | 157.5° | 160°   | 165°   | 170°   | 175°   | 180°   | 185°   | 190°   | 195°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 547.0  | 551.0  | 553.0  | 550.9  | 546.7  | 542.4  | 538.2  | 534.0  | 538.2  | 542.4  | 546.7  |
| 115°   | 632.3  | 626.4  | 623.5  | 621.5  | 617.5  | 613.6  | 609.6  | 605.6  | 609.6  | 613.6  | 617.5  |
| 117.5° | 694.9  | 690.9  | 688.9  | 686.6  | 681.9  | 677.2  | 672.5  | 667.8  | 672.5  | 677.2  | 681.9  |
| 120°   | 759.4  | 755.2  | 753.1  | 751.3  | 747.8  | 744.3  | 740.8  | 737.3  | 740.8  | 744.3  | 747.8  |
| 122.5° | 820.1  | 815.4  | 813.1  | 811.2  | 807.5  | 803.8  | 800.0  | 796.3  | 800.0  | 803.8  | 807.5  |
| 125°   | 876.7  | 872.2  | 870.0  | 868.5  | 865.4  | 862.4  | 859.3  | 856.3  | 859.3  | 862.4  | 865.4  |
| 127.5° | 931.1  | 927.6  | 925.8  | 924.2  | 920.9  | 917.6  | 914.4  | 911.1  | 914.4  | 917.6  | 920.9  |
| 130°   | 983.4  | 980.9  | 979.6  | 977.7  | 974.0  | 970.2  | 966.5  | 962.7  | 966.5  | 970.2  | 974.0  |
| 132.5° | 1032.9 | 1030.4 | 1029.1 | 1027.6 | 1024.5 | 1021.5 | 1018.4 | 1015.4 | 1018.4 | 1021.5 | 1024.5 |
| 135°   | 1079.6 | 1077.5 | 1076.5 | 1074.6 | 1070.9 | 1067.1 | 1063.4 | 1059.6 | 1063.4 | 1067.1 | 1070.9 |
| 137.5° | 1122.1 | 1119.8 | 1118.6 | 1117.2 | 1114.4 | 1111.6 | 1108.8 | 1106.0 | 1108.8 | 1111.6 | 1114.4 |
| 140°   | 1163.6 | 1161.0 | 1159.7 | 1158.8 | 1156.9 | 1155.0 | 1153.1 | 1151.2 | 1153.1 | 1155.0 | 1156.9 |
| 142.5° | 1201.1 | 1198.0 | 1196.5 | 1195.7 | 1194.1 | 1192.4 | 1190.8 | 1189.2 | 1190.8 | 1192.4 | 1194.1 |
| 145°   | 1234.1 | 1230.1 | 1228.1 | 1228.2 | 1228.5 | 1228.7 | 1229.0 | 1229.2 | 1229.0 | 1228.7 | 1228.5 |
| 147.5° | 1266.8 | 1262.8 | 1260.8 | 1261.1 | 1261.8 | 1262.5 | 1263.2 | 1263.9 | 1263.2 | 1262.5 | 1261.8 |
| 150°   | 1295.9 | 1292.2 | 1290.3 | 1291.1 | 1292.8 | 1294.4 | 1296.1 | 1297.7 | 1296.1 | 1294.4 | 1292.8 |
| 152.5° | 1323.0 | 1319.5 | 1317.7 | 1318.6 | 1320.5 | 1322.4 | 1324.2 | 1326.1 | 1324.2 | 1322.4 | 1320.5 |
| 155°   | 1348.2 | 1345.4 | 1344.0 | 1345.1 | 1347.2 | 1349.3 | 1351.4 | 1353.5 | 1351.4 | 1349.3 | 1347.2 |
| 157.5° | 1370.3 | 1368.2 | 1367.2 | 1368.1 | 1370.0 | 1371.9 | 1373.7 | 1375.6 | 1373.7 | 1371.9 | 1370.0 |
| 160°   | 1390.3 | 1388.9 | 1388.2 | 1388.9 | 1390.3 | 1391.8 | 1393.2 | 1394.6 | 1393.2 | 1391.8 | 1390.3 |
| 162.5° | 1406.9 | 1405.7 | 1405.1 | 1405.8 | 1407.2 | 1408.6 | 1410.0 | 1411.4 | 1410.0 | 1408.6 | 1407.2 |
| 165°   | 1420.9 | 1420.2 | 1419.8 | 1420.5 | 1421.9 | 1423.4 | 1424.8 | 1426.2 | 1424.8 | 1423.4 | 1421.9 |
| 167.5° | 1432.5 | 1431.8 | 1431.4 | 1432.1 | 1433.5 | 1434.9 | 1436.3 | 1437.7 | 1436.3 | 1434.9 | 1433.5 |
| 170°   | 1441.6 | 1441.1 | 1440.9 | 1441.6 | 1443.0 | 1444.4 | 1445.8 | 1447.2 | 1445.8 | 1444.4 | 1443.0 |
| 172.5° | 1447.9 | 1447.4 | 1447.2 | 1447.9 | 1449.3 | 1450.7 | 1452.1 | 1453.5 | 1452.1 | 1450.7 | 1449.3 |
| 175°   | 1452.1 | 1451.6 | 1451.4 | 1452.2 | 1453.9 | 1455.5 | 1457.2 | 1458.8 | 1457.2 | 1455.5 | 1453.9 |
| 177.5° | 1453.9 | 1453.6 | 1453.5 | 1454.3 | 1456.0 | 1457.6 | 1459.3 | 1460.9 | 1459.3 | 1457.6 | 1456.0 |
| 180°   | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 |

TEST NUMBER: P998081

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**CANDELA DISTRIBUTION (continued):**

|        | 200°  | 202.5° | 205°  | 210°  | 215°  | 220°  | 225°  | 230°  | 235°  | 240°  | 245°  |
|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 570.2 | 570.2  | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 |
| 2.5°   | 564.0 | 566.2  | 565.8 | 561.4 | 556.6 | 552.7 | 545.2 | 546.1 | 543.4 | 543.9 | 546.5 |
| 5°     | 550.0 | 550.0  | 548.3 | 542.1 | 534.2 | 529.9 | 521.5 | 519.3 | 514.1 | 513.6 | 513.2 |
| 7.5°   | 535.1 | 532.9  | 530.7 | 522.0 | 512.3 | 505.3 | 493.9 | 491.3 | 486.0 | 482.5 | 480.8 |
| 10°    | 517.6 | 514.5  | 510.1 | 500.1 | 488.2 | 479.5 | 467.6 | 464.1 | 454.0 | 449.7 | 447.0 |
| 12.5°  | 498.3 | 496.6  | 489.5 | 481.2 | 461.9 | 452.3 | 435.2 | 438.7 | 428.6 | 419.9 | 418.5 |
| 15°    | 479.0 | 472.5  | 468.5 | 454.9 | 431.7 | 427.3 | 413.7 | 406.7 | 397.5 | 390.5 | 390.5 |
| 17.5°  | 460.2 | 450.1  | 441.3 | 426.9 | 409.8 | 397.5 | 387.4 | 383.9 | 372.5 | 365.5 | 364.2 |
| 20°    | 435.2 | 423.8  | 421.6 | 401.0 | 389.2 | 375.6 | 366.0 | 357.2 | 348.9 | 345.8 | 343.6 |
| 22.5°  | 411.5 | 398.4  | 394.9 | 377.3 | 365.5 | 351.9 | 342.3 | 336.2 | 330.0 | 327.8 | 323.9 |
| 25°    | 386.1 | 378.2  | 373.0 | 354.1 | 341.0 | 328.3 | 321.7 | 317.3 | 311.6 | 311.2 | 308.5 |
| 27.5°  | 361.6 | 354.1  | 348.9 | 330.9 | 321.2 | 309.4 | 304.2 | 299.3 | 296.3 | 295.0 | 293.6 |
| 30°    | 340.5 | 332.2  | 326.1 | 312.9 | 301.1 | 291.4 | 287.1 | 284.0 | 282.2 | 280.1 | 279.6 |
| 32.5°  | 317.3 | 312.5  | 304.2 | 294.1 | 284.9 | 275.7 | 273.0 | 270.8 | 268.2 | 267.3 | 266.9 |
| 35°    | 297.6 | 291.0  | 285.7 | 274.4 | 270.4 | 262.5 | 259.5 | 257.7 | 254.2 | 253.3 | 252.4 |
| 37.5°  | 278.3 | 272.2  | 266.5 | 259.5 | 252.0 | 247.6 | 245.9 | 243.2 | 241.5 | 241.9 | 241.0 |
| 40°    | 259.0 | 254.2  | 249.8 | 242.4 | 238.0 | 235.8 | 232.3 | 229.7 | 228.8 | 229.2 | 228.8 |
| 42.5°  | 240.2 | 235.8  | 233.2 | 227.5 | 223.1 | 220.9 | 218.7 | 216.1 | 217.4 | 217.4 | 218.7 |
| 45°    | 223.1 | 219.1  | 217.4 | 213.0 | 210.4 | 206.9 | 204.7 | 204.2 | 206.0 | 205.5 | 205.5 |
| 47.5°  | 205.5 | 204.2  | 202.0 | 198.1 | 194.6 | 192.4 | 192.0 | 192.0 | 193.7 | 194.6 | 194.2 |
| 50°    | 192.0 | 189.3  | 186.7 | 183.6 | 181.0 | 180.1 | 178.8 | 179.7 | 181.4 | 181.4 | 182.3 |
| 52.5°  | 174.9 | 173.1  | 172.2 | 169.6 | 167.9 | 167.9 | 167.9 | 168.3 | 169.6 | 170.9 | 170.5 |
| 55°    | 160.0 | 158.7  | 157.8 | 156.5 | 154.3 | 154.7 | 154.3 | 155.1 | 156.5 | 157.8 | 158.7 |
| 57.5°  | 144.2 | 143.8  | 142.9 | 140.7 | 140.7 | 140.2 | 141.6 | 142.0 | 144.2 | 145.1 | 146.4 |
| 60°    | 130.2 | 128.9  | 128.9 | 127.1 | 127.1 | 127.1 | 128.4 | 129.7 | 131.5 | 131.9 | 132.8 |
| 62.5°  | 115.3 | 115.3  | 114.8 | 113.5 | 113.5 | 114.8 | 115.3 | 117.0 | 117.9 | 117.9 | 119.2 |
| 65°    | 101.2 | 100.8  | 100.4 | 100.8 | 101.2 | 101.2 | 102.6 | 103.4 | 104.3 | 104.7 | 105.2 |
| 67.5°  | 87.2  | 86.8   | 87.7  | 87.2  | 88.1  | 89.8  | 89.4  | 90.7  | 92.0  | 92.0  | 92.5  |
| 70°    | 74.1  | 74.9   | 74.5  | 75.4  | 74.9  | 75.8  | 77.1  | 77.6  | 77.6  | 78.0  | 79.3  |
| 72.5°  | 61.8  | 61.8   | 61.8  | 61.4  | 61.8  | 62.7  | 63.5  | 64.0  | 64.9  | 65.3  | 66.6  |
| 75°    | 50.0  | 50.0   | 49.1  | 50.0  | 50.0  | 50.8  | 51.7  | 51.7  | 51.7  | 52.6  | 53.9  |
| 77.5°  | 37.7  | 38.1   | 37.7  | 38.6  | 38.6  | 39.0  | 39.9  | 39.4  | 40.3  | 40.8  | 41.2  |
| 80°    | 27.6  | 27.2   | 27.2  | 27.2  | 27.6  | 27.6  | 28.5  | 28.9  | 28.9  | 30.2  | 29.4  |
| 82.5°  | 17.5  | 18.0   | 17.5  | 18.0  | 18.0  | 18.4  | 18.0  | 18.4  | 18.8  | 19.7  | 19.3  |
| 85°    | 10.1  | 9.6    | 9.6   | 10.1  | 9.6   | 9.6   | 10.1  | 9.6   | 10.1  | 9.6   | 10.1  |
| 87.5°  | 3.9   | 3.5    | 3.5   | 3.5   | 3.5   | 3.1   | 3.1   | 2.6   | 2.6   | 2.6   | 2.2   |
| 90°    | 11.3  | 12.6   | 13.5  | 15.4  | 17.3  | 19.2  | 21.1  | 22.3  | 23.4  | 24.6  | 25.7  |
| 92.5°  | 22.6  | 22.1   | 22.5  | 23.2  | 23.9  | 24.6  | 25.3  | 25.8  | 26.2  | 26.7  | 27.2  |
| 95°    | 37.6  | 33.7   | 34.5  | 36.2  | 37.8  | 39.5  | 41.1  | 42.3  | 43.4  | 44.6  | 45.7  |
| 97.5°  | 46.5  | 36.9   | 38.8  | 42.5  | 46.2  | 50.0  | 53.7  | 54.4  | 55.1  | 55.8  | 56.5  |
| 100°   | 58.1  | 42.1   | 44.1  | 48.1  | 52.0  | 56.0  | 60.0  | 61.9  | 63.8  | 65.7  | 67.6  |
| 102.5° | 254.0 | 253.8  | 232.5 | 189.9 | 147.3 | 104.7 | 62.1  | 64.7  | 67.3  | 69.8  | 72.4  |
| 105°   | 348.3 | 351.8  | 319.9 | 256.0 | 192.1 | 128.2 | 64.3  | 66.9  | 69.4  | 72.0  | 74.5  |
| 107.5° | 418.4 | 421.3  | 381.9 | 303.0 | 224.1 | 145.3 | 66.4  | 69.0  | 71.5  | 74.1  | 76.6  |
| 110°   | 486.2 | 488.7  | 454.9 | 387.2 | 319.6 | 251.9 | 184.3 | 160.9 | 137.5 | 114.1 | 90.7  |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 200°   | 202.5° | 205°   | 210°   | 215°   | 220°   | 225°   | 230°   | 235°   | 240°   | 245°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 550.9  | 553.0  | 551.0  | 547.0  | 543.1  | 539.1  | 535.1  | 434.2  | 333.3  | 232.4  | 131.5  |
| 115°   | 621.5  | 623.5  | 626.4  | 632.3  | 638.2  | 644.0  | 649.9  | 541.5  | 433.1  | 324.8  | 216.4  |
| 117.5° | 686.6  | 688.9  | 690.9  | 694.9  | 698.8  | 702.8  | 706.8  | 673.3  | 639.8  | 606.3  | 572.8  |
| 120°   | 751.3  | 753.1  | 755.2  | 759.4  | 763.7  | 767.9  | 772.1  | 774.9  | 777.7  | 780.5  | 783.3  |
| 122.5° | 811.2  | 813.1  | 815.4  | 820.1  | 824.8  | 829.5  | 834.2  | 835.6  | 837.0  | 838.4  | 839.8  |
| 125°   | 868.5  | 870.0  | 872.2  | 876.7  | 881.1  | 885.6  | 890.0  | 891.6  | 893.3  | 894.9  | 896.6  |
| 127.5° | 924.2  | 925.8  | 927.6  | 931.1  | 934.6  | 938.1  | 941.6  | 944.0  | 946.3  | 948.7  | 951.0  |
| 130°   | 977.7  | 979.6  | 980.9  | 983.4  | 986.0  | 988.5  | 991.1  | 993.7  | 996.3  | 998.8  | 1001.4 |
| 132.5° | 1027.6 | 1029.1 | 1030.4 | 1032.9 | 1035.5 | 1038.0 | 1040.6 | 1042.7 | 1044.8 | 1046.9 | 1049.0 |
| 135°   | 1074.6 | 1076.5 | 1077.5 | 1079.6 | 1081.7 | 1083.8 | 1085.9 | 1088.3 | 1090.6 | 1093.0 | 1095.3 |
| 137.5° | 1117.2 | 1118.6 | 1119.8 | 1122.1 | 1124.4 | 1126.8 | 1129.1 | 1131.5 | 1133.8 | 1136.2 | 1138.5 |
| 140°   | 1158.8 | 1159.7 | 1161.0 | 1163.6 | 1166.1 | 1168.7 | 1171.3 | 1173.4 | 1175.5 | 1177.6 | 1179.7 |
| 142.5° | 1195.7 | 1196.5 | 1198.0 | 1201.1 | 1204.1 | 1207.2 | 1210.2 | 1212.1 | 1214.0 | 1215.9 | 1217.8 |
| 145°   | 1228.2 | 1228.1 | 1230.1 | 1234.1 | 1238.0 | 1242.0 | 1246.0 | 1247.6 | 1249.3 | 1250.9 | 1252.6 |
| 147.5° | 1261.1 | 1260.8 | 1262.8 | 1266.8 | 1270.7 | 1274.7 | 1278.7 | 1279.9 | 1281.1 | 1282.2 | 1283.4 |
| 150°   | 1291.1 | 1290.3 | 1292.2 | 1295.9 | 1299.6 | 1303.4 | 1307.1 | 1308.5 | 1309.9 | 1311.4 | 1312.8 |
| 152.5° | 1318.6 | 1317.7 | 1319.5 | 1323.0 | 1326.5 | 1330.0 | 1333.5 | 1334.9 | 1336.3 | 1337.7 | 1339.1 |
| 155°   | 1345.1 | 1344.0 | 1345.4 | 1348.2 | 1351.0 | 1353.8 | 1356.6 | 1358.0 | 1359.4 | 1360.9 | 1362.3 |
| 157.5° | 1368.1 | 1367.2 | 1368.2 | 1370.3 | 1372.4 | 1374.5 | 1376.6 | 1378.2 | 1379.9 | 1381.5 | 1383.2 |
| 160°   | 1388.9 | 1388.2 | 1388.9 | 1390.3 | 1391.8 | 1393.2 | 1394.6 | 1396.0 | 1397.4 | 1398.8 | 1400.2 |
| 162.5° | 1405.8 | 1405.1 | 1405.7 | 1406.9 | 1408.0 | 1409.2 | 1410.4 | 1412.0 | 1413.6 | 1415.3 | 1416.9 |
| 165°   | 1420.5 | 1419.8 | 1420.2 | 1420.9 | 1421.6 | 1422.3 | 1423.0 | 1424.6 | 1426.3 | 1427.9 | 1429.6 |
| 167.5° | 1432.1 | 1431.4 | 1431.8 | 1432.5 | 1433.2 | 1433.9 | 1434.6 | 1436.2 | 1437.9 | 1439.5 | 1441.2 |
| 170°   | 1441.6 | 1440.9 | 1441.1 | 1441.6 | 1442.1 | 1442.5 | 1443.0 | 1444.6 | 1446.3 | 1447.9 | 1449.6 |
| 172.5° | 1447.9 | 1447.2 | 1447.4 | 1447.9 | 1448.4 | 1448.8 | 1449.3 | 1450.9 | 1452.6 | 1454.2 | 1455.9 |
| 175°   | 1452.2 | 1451.4 | 1451.6 | 1452.1 | 1452.6 | 1453.0 | 1453.5 | 1455.1 | 1456.8 | 1458.4 | 1460.1 |
| 177.5° | 1454.3 | 1453.5 | 1453.6 | 1453.9 | 1454.1 | 1454.4 | 1454.6 | 1456.2 | 1457.9 | 1459.5 | 1461.2 |
| 180°   | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 250°  | 255°  | 260°  | 265°  | 270°  | 275°  | 280°  | 285°  | 290°  | 292.5° |
|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 0°     | 570.2  | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2  |
| 2.5°   | 543.4  | 544.8 | 541.7 | 540.8 | 541.7 | 538.6 | 539.5 | 540.4 | 540.4 | 541.7 | 542.6  |
| 5°     | 511.9  | 510.1 | 507.1 | 506.2 | 505.3 | 506.6 | 505.8 | 507.1 | 507.5 | 510.6 | 511.0  |
| 7.5°   | 480.8  | 478.1 | 475.5 | 472.9 | 472.0 | 469.8 | 472.0 | 472.0 | 475.1 | 474.2 | 476.4  |
| 10°    | 444.0  | 443.5 | 440.0 | 438.7 | 437.0 | 433.4 | 438.3 | 437.0 | 439.1 | 443.1 | 444.0  |
| 12.5°  | 416.8  | 412.0 | 414.2 | 408.0 | 410.2 | 406.7 | 407.1 | 407.1 | 410.7 | 411.1 | 410.2  |
| 15°    | 390.9  | 387.0 | 381.3 | 378.7 | 377.3 | 375.6 | 381.3 | 381.7 | 379.1 | 385.2 | 383.0  |
| 17.5°  | 364.6  | 364.6 | 359.4 | 358.1 | 354.6 | 356.3 | 355.4 | 355.9 | 355.0 | 359.4 | 361.6  |
| 20°    | 341.8  | 339.7 | 337.9 | 338.3 | 334.0 | 333.1 | 332.2 | 333.1 | 336.2 | 339.2 | 340.1  |
| 22.5°  | 323.4  | 322.1 | 317.7 | 318.6 | 315.1 | 316.4 | 315.6 | 317.7 | 318.2 | 318.2 | 321.2  |
| 25°    | 305.9  | 304.2 | 304.6 | 302.8 | 301.5 | 301.5 | 300.2 | 301.5 | 303.3 | 304.2 | 304.6  |
| 27.5°  | 292.8  | 291.4 | 289.3 | 287.9 | 288.8 | 286.6 | 288.4 | 289.7 | 289.7 | 288.8 | 289.7  |
| 30°    | 277.0  | 277.9 | 277.9 | 273.5 | 275.2 | 274.4 | 275.7 | 276.5 | 276.5 | 277.0 | 276.1  |
| 32.5°  | 266.5  | 263.8 | 263.4 | 263.0 | 263.0 | 261.2 | 261.2 | 262.5 | 263.0 | 263.4 | 264.7  |
| 35°    | 252.4  | 252.4 | 250.2 | 251.6 | 249.8 | 250.2 | 249.8 | 250.2 | 251.1 | 249.8 | 251.1  |
| 37.5°  | 239.7  | 240.2 | 239.3 | 240.2 | 240.6 | 239.7 | 238.9 | 240.6 | 239.7 | 239.7 | 238.9  |
| 40°    | 228.8  | 228.3 | 228.8 | 228.8 | 228.8 | 229.2 | 228.3 | 228.3 | 228.3 | 227.5 | 226.6  |
| 42.5°  | 219.6  | 216.9 | 217.8 | 218.3 | 216.9 | 216.9 | 217.4 | 216.9 | 218.3 | 215.6 | 215.6  |
| 45°    | 206.4  | 205.5 | 206.0 | 206.0 | 206.9 | 205.5 | 206.4 | 206.9 | 205.5 | 205.1 | 204.2  |
| 47.5°  | 194.6  | 195.5 | 194.6 | 195.5 | 195.5 | 196.3 | 194.6 | 195.0 | 195.5 | 193.7 | 192.4  |
| 50°    | 182.8  | 182.8 | 184.1 | 183.6 | 184.1 | 183.2 | 183.2 | 182.8 | 183.2 | 182.3 | 181.0  |
| 52.5°  | 171.8  | 170.5 | 172.7 | 172.2 | 171.8 | 171.4 | 170.9 | 171.4 | 170.5 | 169.6 | 169.6  |
| 55°    | 158.2  | 158.2 | 159.5 | 160.0 | 160.0 | 159.1 | 158.2 | 158.7 | 158.2 | 157.8 | 157.3  |
| 57.5°  | 147.3  | 145.5 | 146.4 | 146.8 | 146.8 | 145.5 | 146.4 | 145.5 | 145.5 | 145.9 | 144.6  |
| 60°    | 133.2  | 133.2 | 132.4 | 133.7 | 133.7 | 132.8 | 132.8 | 133.2 | 132.4 | 131.9 | 131.5  |
| 62.5°  | 118.3  | 118.8 | 120.1 | 120.5 | 121.0 | 120.1 | 119.2 | 119.6 | 119.6 | 118.3 | 118.8  |
| 65°    | 105.6  | 106.5 | 108.3 | 107.8 | 106.9 | 107.4 | 106.5 | 106.9 | 105.6 | 106.1 | 104.7  |
| 67.5°  | 93.4   | 92.9  | 93.4  | 93.4  | 94.2  | 93.8  | 92.9  | 92.9  | 92.5  | 93.8  | 92.5   |
| 70°    | 80.2   | 80.2  | 80.2  | 80.2  | 80.6  | 81.1  | 80.2  | 79.3  | 79.8  | 78.9  | 78.4   |
| 72.5°  | 66.6   | 67.1  | 66.6  | 67.5  | 66.2  | 67.1  | 67.1  | 66.6  | 66.2  | 66.2  | 66.2   |
| 75°    | 53.9   | 54.8  | 53.5  | 53.9  | 53.5  | 54.3  | 53.9  | 53.9  | 53.0  | 52.6  | 53.0   |
| 77.5°  | 41.2   | 41.6  | 40.8  | 41.2  | 40.8  | 41.2  | 41.2  | 40.8  | 40.8  | 40.8  | 40.8   |
| 80°    | 29.4   | 29.8  | 29.4  | 28.9  | 28.5  | 29.4  | 28.5  | 28.9  | 29.4  | 28.9  | 29.8   |
| 82.5°  | 18.8   | 18.8  | 18.4  | 18.8  | 18.0  | 18.0  | 18.4  | 18.4  | 18.0  | 18.8  | 18.0   |
| 85°    | 9.2    | 9.2   | 10.1  | 9.2   | 8.8   | 8.8   | 8.8   | 9.2   | 8.8   | 9.6   | 9.2    |
| 87.5°  | 2.2    | 1.8   | 2.2   | 2.2   | 1.8   | 1.8   | 2.2   | 1.8   | 2.2   | 2.6   | 1.8    |
| 90°    | 26.3   | 26.5  | 27.0  | 27.5  | 27.9  | 28.4  | 27.9  | 27.5  | 27.0  | 26.5  | 26.3   |
| 92.5°  | 27.4   | 27.5  | 27.7  | 28.0  | 28.2  | 28.4  | 28.2  | 28.0  | 27.7  | 27.5  | 27.4   |
| 95°    | 46.3   | 46.2  | 46.0  | 45.7  | 45.5  | 45.3  | 45.5  | 45.7  | 46.0  | 46.2  | 46.3   |
| 97.5°  | 56.9   | 57.0  | 57.2  | 57.5  | 57.7  | 57.9  | 57.7  | 57.5  | 57.2  | 57.0  | 56.9   |
| 100°   | 68.5   | 68.7  | 69.2  | 69.7  | 70.1  | 70.6  | 70.1  | 69.7  | 69.2  | 68.7  | 68.5   |
| 102.5° | 73.7   | 74.1  | 74.8  | 75.5  | 76.2  | 76.9  | 76.2  | 75.5  | 74.8  | 74.1  | 73.7   |
| 105°   | 75.8   | 76.3  | 77.2  | 78.1  | 79.1  | 80.0  | 79.1  | 78.1  | 77.2  | 76.3  | 75.8   |
| 107.5° | 77.9   | 78.4  | 79.3  | 80.3  | 81.2  | 82.2  | 81.2  | 80.3  | 79.3  | 78.4  | 77.9   |
| 110°   | 79.0   | 79.5  | 80.4  | 81.3  | 82.3  | 83.2  | 82.3  | 81.3  | 80.4  | 79.5  | 79.0   |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 250°   | 255°   | 260°   | 265°   | 270°   | 275°   | 280°   | 285°   | 290°   | 292.5° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 81.1   | 81.5   | 82.2   | 82.9   | 83.6   | 84.3   | 83.6   | 82.9   | 82.2   | 81.5   | 81.1   |
| 115°   | 162.2  | 153.8  | 136.9  | 120.1  | 103.2  | 86.4   | 103.2  | 120.1  | 136.9  | 153.8  | 162.2  |
| 117.5° | 556.1  | 525.4  | 464.1  | 402.8  | 341.5  | 280.2  | 341.5  | 402.8  | 464.1  | 525.4  | 556.1  |
| 120°   | 784.7  | 768.9  | 737.3  | 705.7  | 674.1  | 642.5  | 674.1  | 705.7  | 737.3  | 768.9  | 784.7  |
| 122.5° | 840.5  | 840.6  | 840.9  | 841.1  | 841.4  | 841.6  | 841.4  | 841.1  | 840.9  | 840.6  | 840.5  |
| 125°   | 897.4  | 897.8  | 898.5  | 899.2  | 899.9  | 900.6  | 899.9  | 899.2  | 898.5  | 897.8  | 897.4  |
| 127.5° | 952.2  | 952.3  | 952.5  | 952.8  | 953.0  | 953.2  | 953.0  | 952.8  | 952.5  | 952.3  | 952.2  |
| 130°   | 1002.7 | 1002.6 | 1002.4 | 1002.1 | 1001.9 | 1001.7 | 1001.9 | 1002.1 | 1002.4 | 1002.6 | 1002.7 |
| 132.5° | 1050.1 | 1050.0 | 1049.8 | 1049.5 | 1049.3 | 1049.1 | 1049.3 | 1049.5 | 1049.8 | 1050.0 | 1050.1 |
| 135°   | 1096.5 | 1096.3 | 1095.8 | 1095.3 | 1094.9 | 1094.4 | 1094.9 | 1095.3 | 1095.8 | 1096.3 | 1096.5 |
| 137.5° | 1139.7 | 1139.3 | 1138.6 | 1137.9 | 1137.2 | 1136.5 | 1137.2 | 1137.9 | 1138.6 | 1139.3 | 1139.7 |
| 140°   | 1180.7 | 1180.1 | 1179.0 | 1177.8 | 1176.7 | 1175.5 | 1176.7 | 1177.8 | 1179.0 | 1180.1 | 1180.7 |
| 142.5° | 1218.7 | 1218.1 | 1216.9 | 1215.8 | 1214.6 | 1213.4 | 1214.6 | 1215.8 | 1216.9 | 1218.1 | 1218.7 |
| 145°   | 1253.4 | 1252.8 | 1251.6 | 1250.5 | 1249.3 | 1248.1 | 1249.3 | 1250.5 | 1251.6 | 1252.8 | 1253.4 |
| 147.5° | 1284.0 | 1283.5 | 1282.6 | 1281.6 | 1280.7 | 1279.7 | 1280.7 | 1281.6 | 1282.6 | 1283.5 | 1284.0 |
| 150°   | 1313.5 | 1312.9 | 1311.7 | 1310.6 | 1309.4 | 1308.2 | 1309.4 | 1310.6 | 1311.7 | 1312.9 | 1313.5 |
| 152.5° | 1339.8 | 1339.0 | 1337.3 | 1335.7 | 1334.0 | 1332.4 | 1334.0 | 1335.7 | 1337.3 | 1339.0 | 1339.8 |
| 155°   | 1363.0 | 1362.1 | 1360.2 | 1358.3 | 1356.4 | 1354.5 | 1356.4 | 1358.3 | 1360.2 | 1362.1 | 1363.0 |
| 157.5° | 1384.0 | 1383.1 | 1381.2 | 1379.3 | 1377.5 | 1375.6 | 1377.5 | 1379.3 | 1381.2 | 1383.1 | 1384.0 |
| 160°   | 1400.9 | 1400.1 | 1398.4 | 1396.8 | 1395.1 | 1393.5 | 1395.1 | 1396.8 | 1398.4 | 1400.1 | 1400.9 |
| 162.5° | 1417.7 | 1416.6 | 1414.5 | 1412.4 | 1410.3 | 1408.2 | 1410.3 | 1412.4 | 1414.5 | 1416.6 | 1417.7 |
| 165°   | 1430.4 | 1429.6 | 1427.9 | 1426.3 | 1424.6 | 1423.0 | 1424.6 | 1426.3 | 1427.9 | 1429.6 | 1430.4 |
| 167.5° | 1442.0 | 1440.9 | 1438.8 | 1436.7 | 1434.6 | 1432.5 | 1434.6 | 1436.7 | 1438.8 | 1440.9 | 1442.0 |
| 170°   | 1450.4 | 1449.3 | 1447.2 | 1445.1 | 1443.0 | 1440.9 | 1443.0 | 1445.1 | 1447.2 | 1449.3 | 1450.4 |
| 172.5° | 1456.7 | 1455.6 | 1453.5 | 1451.4 | 1449.3 | 1447.2 | 1449.3 | 1451.4 | 1453.5 | 1455.6 | 1456.7 |
| 175°   | 1460.9 | 1459.7 | 1457.4 | 1455.1 | 1452.7 | 1450.4 | 1452.7 | 1455.1 | 1457.4 | 1459.7 | 1460.9 |
| 177.5° | 1462.0 | 1460.9 | 1458.8 | 1456.7 | 1454.6 | 1452.5 | 1454.6 | 1456.7 | 1458.8 | 1460.9 | 1462.0 |
| 180°   | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 295°  | 300°  | 305°  | 310°  | 315°  | 320°  | 325°  | 330°  | 335°  | 337.5° | 340°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 0°     | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2 | 570.2  | 570.2 |
| 2.5°   | 541.3 | 544.8 | 543.4 | 538.6 | 544.3 | 544.3 | 548.3 | 548.3 | 553.1 | 554.8  | 557.5 |
| 5°     | 510.6 | 513.2 | 515.4 | 513.2 | 517.2 | 523.3 | 526.8 | 529.9 | 536.4 | 539.1  | 543.0 |
| 7.5°   | 477.7 | 482.5 | 484.7 | 484.7 | 491.3 | 498.3 | 505.3 | 509.7 | 518.9 | 522.4  | 526.4 |
| 10°    | 445.7 | 451.4 | 455.8 | 455.4 | 466.3 | 470.7 | 479.5 | 489.5 | 498.7 | 504.0  | 509.7 |
| 12.5°  | 412.0 | 415.0 | 421.2 | 429.9 | 432.6 | 440.5 | 450.5 | 463.2 | 479.9 | 484.7  | 493.0 |
| 15°    | 383.9 | 392.2 | 397.1 | 401.0 | 407.1 | 414.6 | 425.6 | 437.8 | 454.5 | 465.0  | 473.8 |
| 17.5°  | 360.3 | 371.2 | 374.3 | 373.4 | 381.3 | 392.7 | 405.4 | 414.6 | 429.5 | 442.2  | 450.5 |
| 20°    | 341.0 | 345.4 | 350.6 | 352.8 | 358.9 | 371.2 | 383.5 | 394.0 | 406.3 | 416.4  | 426.0 |
| 22.5°  | 321.7 | 325.2 | 329.6 | 333.5 | 338.3 | 345.4 | 357.2 | 370.3 | 382.2 | 391.8  | 402.8 |
| 25°    | 305.9 | 308.1 | 312.0 | 315.1 | 320.4 | 325.2 | 333.5 | 348.0 | 362.0 | 367.7  | 377.3 |
| 27.5°  | 290.6 | 292.3 | 295.0 | 298.5 | 301.1 | 305.9 | 313.4 | 325.2 | 339.7 | 345.4  | 358.5 |
| 30°    | 277.0 | 278.3 | 280.9 | 282.7 | 284.0 | 289.7 | 295.4 | 304.6 | 315.6 | 323.4  | 333.1 |
| 32.5°  | 264.3 | 265.6 | 268.2 | 268.7 | 270.4 | 273.5 | 278.7 | 287.1 | 296.7 | 303.3  | 311.6 |
| 35°    | 250.2 | 251.1 | 253.8 | 254.6 | 255.9 | 258.6 | 262.5 | 268.7 | 277.4 | 282.2  | 289.7 |
| 37.5°  | 239.3 | 238.9 | 240.6 | 241.9 | 243.7 | 245.0 | 246.3 | 252.4 | 259.0 | 263.4  | 269.1 |
| 40°    | 227.5 | 226.6 | 227.0 | 228.8 | 229.7 | 231.4 | 231.4 | 237.5 | 241.9 | 245.4  | 249.8 |
| 42.5°  | 215.6 | 215.2 | 214.3 | 215.2 | 216.1 | 216.5 | 216.9 | 221.3 | 225.7 | 228.8  | 233.6 |
| 45°    | 203.8 | 203.4 | 202.5 | 202.9 | 202.9 | 203.8 | 205.1 | 206.9 | 209.9 | 212.6  | 215.2 |
| 47.5°  | 192.8 | 192.0 | 190.6 | 190.2 | 191.1 | 191.1 | 191.1 | 192.8 | 195.9 | 196.8  | 199.4 |
| 50°    | 181.4 | 180.1 | 178.4 | 177.5 | 177.5 | 177.1 | 177.9 | 178.4 | 181.0 | 181.9  | 184.1 |
| 52.5°  | 169.2 | 168.3 | 166.5 | 164.8 | 165.2 | 164.3 | 164.8 | 165.2 | 166.1 | 167.4  | 168.7 |
| 55°    | 156.9 | 155.1 | 153.8 | 153.4 | 152.1 | 152.1 | 150.8 | 152.5 | 152.1 | 152.5  | 154.3 |
| 57.5°  | 145.1 | 143.3 | 141.1 | 140.2 | 138.9 | 138.5 | 137.6 | 137.2 | 137.6 | 138.9  | 140.2 |
| 60°    | 131.0 | 130.2 | 128.9 | 127.5 | 126.7 | 125.3 | 124.5 | 124.5 | 124.0 | 124.0  | 124.5 |
| 62.5°  | 117.5 | 117.0 | 115.3 | 114.8 | 113.9 | 113.1 | 111.8 | 110.9 | 110.9 | 111.8  | 112.2 |
| 65°    | 104.3 | 103.9 | 102.6 | 102.1 | 99.9  | 99.0  | 98.6  | 98.2  | 97.3  | 97.3   | 97.3  |
| 67.5°  | 92.0  | 90.7  | 90.7  | 88.5  | 86.8  | 85.9  | 85.0  | 84.6  | 84.6  | 84.6   | 85.0  |
| 70°    | 78.4  | 78.4  | 77.1  | 75.8  | 74.1  | 74.5  | 73.2  | 71.9  | 71.9  | 71.0   | 71.4  |
| 72.5°  | 65.3  | 64.9  | 63.5  | 63.1  | 61.8  | 60.5  | 59.6  | 60.5  | 59.2  | 58.7   | 59.2  |
| 75°    | 52.6  | 52.2  | 51.3  | 50.4  | 50.8  | 49.5  | 48.2  | 47.8  | 47.8  | 46.9   | 46.9  |
| 77.5°  | 40.3  | 41.2  | 39.4  | 39.0  | 38.1  | 37.3  | 36.8  | 36.4  | 36.4  | 36.4   | 37.3  |
| 80°    | 28.0  | 28.5  | 28.5  | 27.6  | 28.0  | 26.7  | 26.7  | 26.7  | 25.4  | 25.9   | 26.3  |
| 82.5°  | 18.0  | 18.0  | 17.5  | 18.0  | 17.5  | 17.5  | 17.1  | 17.1  | 16.7  | 16.7   | 17.1  |
| 85°    | 10.1  | 9.6   | 9.2   | 10.1  | 9.6   | 9.6   | 9.2   | 9.2   | 9.2   | 9.2    | 9.2   |
| 87.5°  | 2.2   | 2.6   | 2.6   | 2.6   | 2.6   | 3.1   | 3.1   | 3.1   | 3.5   | 3.5    | 3.5   |
| 90°    | 25.7  | 24.6  | 23.4  | 22.3  | 21.1  | 19.2  | 17.3  | 15.4  | 13.5  | 12.6   | 11.3  |
| 92.5°  | 27.2  | 26.7  | 26.2  | 25.8  | 25.3  | 24.6  | 23.9  | 23.2  | 22.5  | 22.1   | 22.6  |
| 95°    | 45.7  | 44.6  | 43.4  | 42.3  | 41.1  | 39.5  | 37.8  | 36.2  | 34.5  | 33.7   | 37.6  |
| 97.5°  | 56.5  | 55.8  | 55.1  | 54.4  | 53.7  | 50.0  | 46.2  | 42.5  | 38.8  | 36.9   | 46.5  |
| 100°   | 67.6  | 65.7  | 63.8  | 61.9  | 60.0  | 56.0  | 52.0  | 48.1  | 44.1  | 42.1   | 58.1  |
| 102.5° | 72.4  | 69.8  | 67.3  | 64.7  | 62.1  | 104.7 | 147.3 | 189.9 | 232.5 | 253.8  | 254.0 |
| 105°   | 74.5  | 72.0  | 69.4  | 66.9  | 64.3  | 128.2 | 192.1 | 256.0 | 319.9 | 351.8  | 348.3 |
| 107.5° | 76.6  | 74.1  | 71.5  | 69.0  | 66.4  | 145.3 | 224.1 | 303.0 | 381.9 | 421.3  | 418.4 |
| 110°   | 90.7  | 114.1 | 137.5 | 160.9 | 184.3 | 251.9 | 319.6 | 387.2 | 454.9 | 488.7  | 486.2 |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 295°   | 300°   | 305°   | 310°   | 315°   | 320°   | 325°   | 330°   | 335°   | 337.5° | 340°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 131.5  | 232.4  | 333.3  | 434.2  | 535.1  | 539.1  | 543.1  | 547.0  | 551.0  | 553.0  | 550.9  |
| 115°   | 216.4  | 324.8  | 433.1  | 541.5  | 649.9  | 644.0  | 638.2  | 632.3  | 626.4  | 623.5  | 621.5  |
| 117.5° | 572.8  | 606.3  | 639.8  | 673.3  | 706.8  | 702.8  | 698.8  | 694.9  | 690.9  | 688.9  | 686.6  |
| 120°   | 783.3  | 780.5  | 777.7  | 774.9  | 772.1  | 767.9  | 763.7  | 759.4  | 755.2  | 753.1  | 751.3  |
| 122.5° | 839.8  | 838.4  | 837.0  | 835.6  | 834.2  | 829.5  | 824.8  | 820.1  | 815.4  | 813.1  | 811.2  |
| 125°   | 896.6  | 894.9  | 893.3  | 891.6  | 890.0  | 885.6  | 881.1  | 876.7  | 872.2  | 870.0  | 868.5  |
| 127.5° | 951.0  | 948.7  | 946.3  | 944.0  | 941.6  | 938.1  | 934.6  | 931.1  | 927.6  | 925.8  | 924.2  |
| 130°   | 1001.4 | 998.8  | 996.3  | 993.7  | 991.1  | 988.5  | 986.0  | 983.4  | 980.9  | 979.6  | 977.7  |
| 132.5° | 1049.0 | 1046.9 | 1044.8 | 1042.7 | 1040.6 | 1038.0 | 1035.5 | 1032.9 | 1030.4 | 1029.1 | 1027.6 |
| 135°   | 1095.3 | 1093.0 | 1090.6 | 1088.3 | 1085.9 | 1083.8 | 1081.7 | 1079.6 | 1077.5 | 1076.5 | 1074.6 |
| 137.5° | 1138.5 | 1136.2 | 1133.8 | 1131.5 | 1129.1 | 1126.8 | 1124.4 | 1122.1 | 1119.8 | 1118.6 | 1117.2 |
| 140°   | 1179.7 | 1177.6 | 1175.5 | 1173.4 | 1171.3 | 1168.7 | 1166.1 | 1163.6 | 1161.0 | 1159.7 | 1158.8 |
| 142.5° | 1217.8 | 1215.9 | 1214.0 | 1212.1 | 1210.2 | 1207.2 | 1204.1 | 1201.1 | 1198.0 | 1196.5 | 1195.7 |
| 145°   | 1252.6 | 1250.9 | 1249.3 | 1247.6 | 1246.0 | 1242.0 | 1238.0 | 1234.1 | 1230.1 | 1228.1 | 1228.2 |
| 147.5° | 1283.4 | 1282.2 | 1281.1 | 1279.9 | 1278.7 | 1274.7 | 1270.7 | 1266.8 | 1262.8 | 1260.8 | 1261.1 |
| 150°   | 1312.8 | 1311.4 | 1309.9 | 1308.5 | 1307.1 | 1303.4 | 1299.6 | 1295.9 | 1292.2 | 1290.3 | 1291.1 |
| 152.5° | 1339.1 | 1337.7 | 1336.3 | 1334.9 | 1333.5 | 1330.0 | 1326.5 | 1323.0 | 1319.5 | 1317.7 | 1318.6 |
| 155°   | 1362.3 | 1360.9 | 1359.4 | 1358.0 | 1356.6 | 1353.8 | 1351.0 | 1348.2 | 1345.4 | 1344.0 | 1345.1 |
| 157.5° | 1383.2 | 1381.5 | 1379.9 | 1378.2 | 1376.6 | 1374.5 | 1372.4 | 1370.3 | 1368.2 | 1367.2 | 1368.1 |
| 160°   | 1400.2 | 1398.8 | 1397.4 | 1396.0 | 1394.6 | 1393.2 | 1391.8 | 1390.3 | 1388.9 | 1388.2 | 1388.9 |
| 162.5° | 1416.9 | 1415.3 | 1413.6 | 1412.0 | 1410.4 | 1409.2 | 1408.0 | 1406.9 | 1405.7 | 1405.1 | 1405.8 |
| 165°   | 1429.6 | 1427.9 | 1426.3 | 1424.6 | 1423.0 | 1422.3 | 1421.6 | 1420.9 | 1420.2 | 1419.8 | 1420.5 |
| 167.5° | 1441.2 | 1439.5 | 1437.9 | 1436.2 | 1434.6 | 1433.9 | 1433.2 | 1432.5 | 1431.8 | 1431.4 | 1432.1 |
| 170°   | 1449.6 | 1447.9 | 1446.3 | 1444.6 | 1443.0 | 1442.5 | 1442.1 | 1441.6 | 1441.1 | 1440.9 | 1441.6 |
| 172.5° | 1455.9 | 1454.2 | 1452.6 | 1450.9 | 1449.3 | 1448.8 | 1448.4 | 1447.9 | 1447.4 | 1447.2 | 1447.9 |
| 175°   | 1460.1 | 1458.4 | 1456.8 | 1455.1 | 1453.5 | 1453.0 | 1452.6 | 1452.1 | 1451.6 | 1451.4 | 1452.2 |
| 177.5° | 1461.2 | 1459.5 | 1457.9 | 1456.2 | 1454.6 | 1454.4 | 1454.1 | 1453.9 | 1453.6 | 1453.5 | 1454.3 |
| 180°   | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 | 1455.6 |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 345°  | 350°  | 355°  | 360°  |
|--------|-------|-------|-------|-------|
| 0°     | 570.2 | 570.2 | 570.2 | 570.2 |
| 2.5°   | 559.7 | 559.7 | 566.2 | 573.3 |
| 5°     | 547.4 | 550.5 | 561.0 | 570.6 |
| 7.5°   | 535.6 | 540.8 | 554.0 | 566.2 |
| 10°    | 521.1 | 528.1 | 544.3 | 558.8 |
| 12.5°  | 507.1 | 513.6 | 532.5 | 548.7 |
| 15°    | 487.4 | 495.7 | 515.8 | 536.0 |
| 17.5°  | 467.6 | 476.0 | 500.5 | 524.2 |
| 20°    | 444.4 | 455.4 | 483.0 | 514.5 |
| 22.5°  | 422.9 | 436.5 | 467.2 | 492.6 |
| 25°    | 399.3 | 420.3 | 448.8 | 481.7 |
| 27.5°  | 378.2 | 399.3 | 428.2 | 461.5 |
| 30°    | 354.6 | 376.0 | 405.8 | 436.5 |
| 32.5°  | 331.8 | 351.5 | 380.4 | 418.1 |
| 35°    | 308.1 | 326.9 | 355.0 | 393.1 |
| 37.5°  | 286.6 | 305.0 | 335.7 | 370.8 |
| 40°    | 265.6 | 284.9 | 311.2 | 346.2 |
| 42.5°  | 245.9 | 263.0 | 286.6 | 321.7 |
| 45°    | 227.9 | 240.2 | 262.1 | 295.0 |
| 47.5°  | 209.1 | 220.0 | 240.2 | 273.0 |
| 50°    | 191.5 | 200.7 | 218.3 | 248.9 |
| 52.5°  | 174.4 | 182.3 | 198.5 | 223.1 |
| 55°    | 159.1 | 166.5 | 178.4 | 202.5 |
| 57.5°  | 143.3 | 149.0 | 160.4 | 179.7 |
| 60°    | 128.0 | 133.2 | 142.4 | 158.2 |
| 62.5°  | 112.6 | 117.0 | 125.8 | 138.5 |
| 65°    | 99.0  | 102.6 | 109.1 | 120.1 |
| 67.5°  | 85.9  | 88.1  | 93.4  | 102.1 |
| 70°    | 73.2  | 74.9  | 79.3  | 86.3  |
| 72.5°  | 59.6  | 61.4  | 66.2  | 71.0  |
| 75°    | 48.2  | 48.6  | 52.2  | 56.1  |
| 77.5°  | 37.7  | 37.3  | 39.9  | 43.0  |
| 80°    | 25.9  | 27.2  | 29.4  | 30.7  |
| 82.5°  | 17.5  | 18.0  | 18.8  | 19.7  |
| 85°    | 9.6   | 10.1  | 10.1  | 11.4  |
| 87.5°  | 3.9   | 4.4   | 4.4   | 4.8   |
| 90°    | 8.8   | 6.2   | 3.7   | 1.1   |
| 92.5°  | 23.5  | 24.4  | 25.4  | 26.3  |
| 95°    | 45.3  | 53.0  | 60.8  | 68.5  |
| 97.5°  | 65.7  | 84.8  | 104.0 | 123.2 |
| 100°   | 90.2  | 122.3 | 154.3 | 186.4 |
| 102.5° | 254.5 | 255.0 | 255.4 | 255.9 |
| 105°   | 341.3 | 334.2 | 327.2 | 320.2 |
| 107.5° | 412.5 | 406.7 | 400.8 | 395.0 |
| 110°   | 481.3 | 476.4 | 471.5 | 466.6 |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CANDELA DISTRIBUTION (continued):**

|        | 345°   | 350°   | 355°   | 360°   |
|--------|--------|--------|--------|--------|
| 112.5° | 546.7  | 542.4  | 538.2  | 534.0  |
| 115°   | 617.5  | 613.6  | 609.6  | 605.6  |
| 117.5° | 681.9  | 677.2  | 672.5  | 667.8  |
| 120°   | 747.8  | 744.3  | 740.8  | 737.3  |
| 122.5° | 807.5  | 803.8  | 800.0  | 796.3  |
| 125°   | 865.4  | 862.4  | 859.3  | 856.3  |
| 127.5° | 920.9  | 917.6  | 914.4  | 911.1  |
| 130°   | 974.0  | 970.2  | 966.5  | 962.7  |
| 132.5° | 1024.5 | 1021.5 | 1018.4 | 1015.4 |
| 135°   | 1070.9 | 1067.1 | 1063.4 | 1059.6 |
| 137.5° | 1114.4 | 1111.6 | 1108.8 | 1106.0 |
| 140°   | 1156.9 | 1155.0 | 1153.1 | 1151.2 |
| 142.5° | 1194.1 | 1192.4 | 1190.8 | 1189.2 |
| 145°   | 1228.5 | 1228.7 | 1229.0 | 1229.2 |
| 147.5° | 1261.8 | 1262.5 | 1263.2 | 1263.9 |
| 150°   | 1292.8 | 1294.4 | 1296.1 | 1297.7 |
| 152.5° | 1320.5 | 1322.4 | 1324.2 | 1326.1 |
| 155°   | 1347.2 | 1349.3 | 1351.4 | 1353.5 |
| 157.5° | 1370.0 | 1371.9 | 1373.7 | 1375.6 |
| 160°   | 1390.3 | 1391.8 | 1393.2 | 1394.6 |
| 162.5° | 1407.2 | 1408.6 | 1410.0 | 1411.4 |
| 165°   | 1421.9 | 1423.4 | 1424.8 | 1426.2 |
| 167.5° | 1433.5 | 1434.9 | 1436.3 | 1437.7 |
| 170°   | 1443.0 | 1444.4 | 1445.8 | 1447.2 |
| 172.5° | 1449.3 | 1450.7 | 1452.1 | 1453.5 |
| 175°   | 1453.9 | 1455.5 | 1457.2 | 1458.8 |
| 177.5° | 1456.0 | 1457.6 | 1459.3 | 1460.9 |
| 180°   | 1455.6 | 1455.6 | 1455.6 | 1455.6 |

TEST NUMBER: P998081

CATALOG NUMBER: SA2XXDIP-B290D1080UB27-4F0-XX-W2A-A

**CIE UGR TABLE:**

| Reflectances:   |      |                  |       |       |       |       |                |       |       |       |       |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling         |      | 0.7              | 0.7   | 0.5   | 0.5   | 0.3   | 0.7            | 0.7   | 0.5   | 0.5   | 0.3   |
| Wall            |      | 0.5              | 0.3   | 0.5   | 0.3   | 0.3   | 0.5            | 0.3   | 0.5   | 0.3   | 0.3   |
| Reference plane |      | 0.2              | 0.2   | 0.2   | 0.2   | 0.2   | 0.2            | 0.2   | 0.2   | 0.2   | 0.2   |
| Room dimensions |      | Viewed crosswise |       |       |       |       | Viewed endwise |       |       |       |       |
| X=2H            | Y=2H | 10.15            | 10.80 | 11.31 | 11.94 | 13.56 | 7.64           | 8.29  | 8.81  | 9.44  | 11.05 |
|                 | 3H   | 10.94            | 11.52 | 12.12 | 12.68 | 14.31 | 8.97           | 9.55  | 10.14 | 10.71 | 12.34 |
|                 | 4H   | 11.10            | 11.65 | 12.28 | 12.81 | 14.44 | 9.42           | 9.97  | 10.60 | 11.13 | 12.76 |
|                 | 6H   | 11.14            | 11.64 | 12.33 | 12.80 | 14.45 | 9.72           | 10.23 | 10.91 | 11.38 | 13.03 |
|                 | 8H   | 11.11            | 11.59 | 12.30 | 12.76 | 14.40 | 9.80           | 10.28 | 10.99 | 11.45 | 13.09 |
|                 | 12H  | 11.07            | 11.52 | 12.26 | 12.69 | 14.35 | 9.83           | 10.29 | 11.02 | 11.45 | 13.11 |
| 4H              | 2H   | 10.16            | 10.71 | 11.35 | 11.87 | 13.50 | 8.06           | 8.61  | 9.25  | 9.77  | 11.40 |
|                 | 3H   | 11.13            | 11.58 | 12.32 | 12.76 | 14.41 | 9.50           | 9.96  | 10.70 | 11.14 | 12.79 |
|                 | 4H   | 11.39            | 11.82 | 12.59 | 12.98 | 14.65 | 10.03          | 10.45 | 11.22 | 11.62 | 13.28 |
|                 | 6H   | 11.51            | 11.87 | 12.71 | 13.06 | 14.72 | 10.40          | 10.76 | 11.59 | 11.95 | 13.60 |
|                 | 8H   | 11.51            | 11.84 | 12.70 | 13.03 | 14.70 | 10.50          | 10.84 | 11.70 | 12.02 | 13.69 |
|                 | 12H  | 11.46            | 11.77 | 12.67 | 12.96 | 14.63 | 10.55          | 10.86 | 11.76 | 12.05 | 13.72 |
| 8H              | 4H   | 11.39            | 11.72 | 12.58 | 12.91 | 14.58 | 10.16          | 10.49 | 11.35 | 11.68 | 13.34 |
|                 | 6H   | 11.56            | 11.84 | 12.77 | 13.06 | 14.73 | 10.58          | 10.86 | 11.80 | 12.08 | 13.75 |
|                 | 8H   | 11.59            | 11.83 | 12.81 | 13.03 | 14.72 | 10.73          | 10.97 | 11.95 | 12.17 | 13.86 |
|                 | 12H  | 11.56            | 11.77 | 12.78 | 12.97 | 14.69 | 10.81          | 11.03 | 12.04 | 12.22 | 13.94 |
| 12H             | 4H   | 11.33            | 11.64 | 12.55 | 12.83 | 14.51 | 10.12          | 10.43 | 11.33 | 11.62 | 13.29 |
|                 | 6H   | 11.54            | 11.78 | 12.75 | 12.98 | 14.67 | 10.58          | 10.82 | 11.80 | 12.02 | 13.71 |
|                 | 8H   | 11.56            | 11.77 | 12.78 | 12.97 | 14.69 | 10.73          | 10.94 | 11.95 | 12.14 | 13.86 |

END OF REPORT