

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: CORELITE

Report Number: P933882

Luminaire Tested: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P933882  
REPORT IS A COMBINATION OF REPORTS P933674 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Asymmetric Frosted Continuous I  
Lens  
Light Source: -  
Ballast/Driver: -

**Summary**

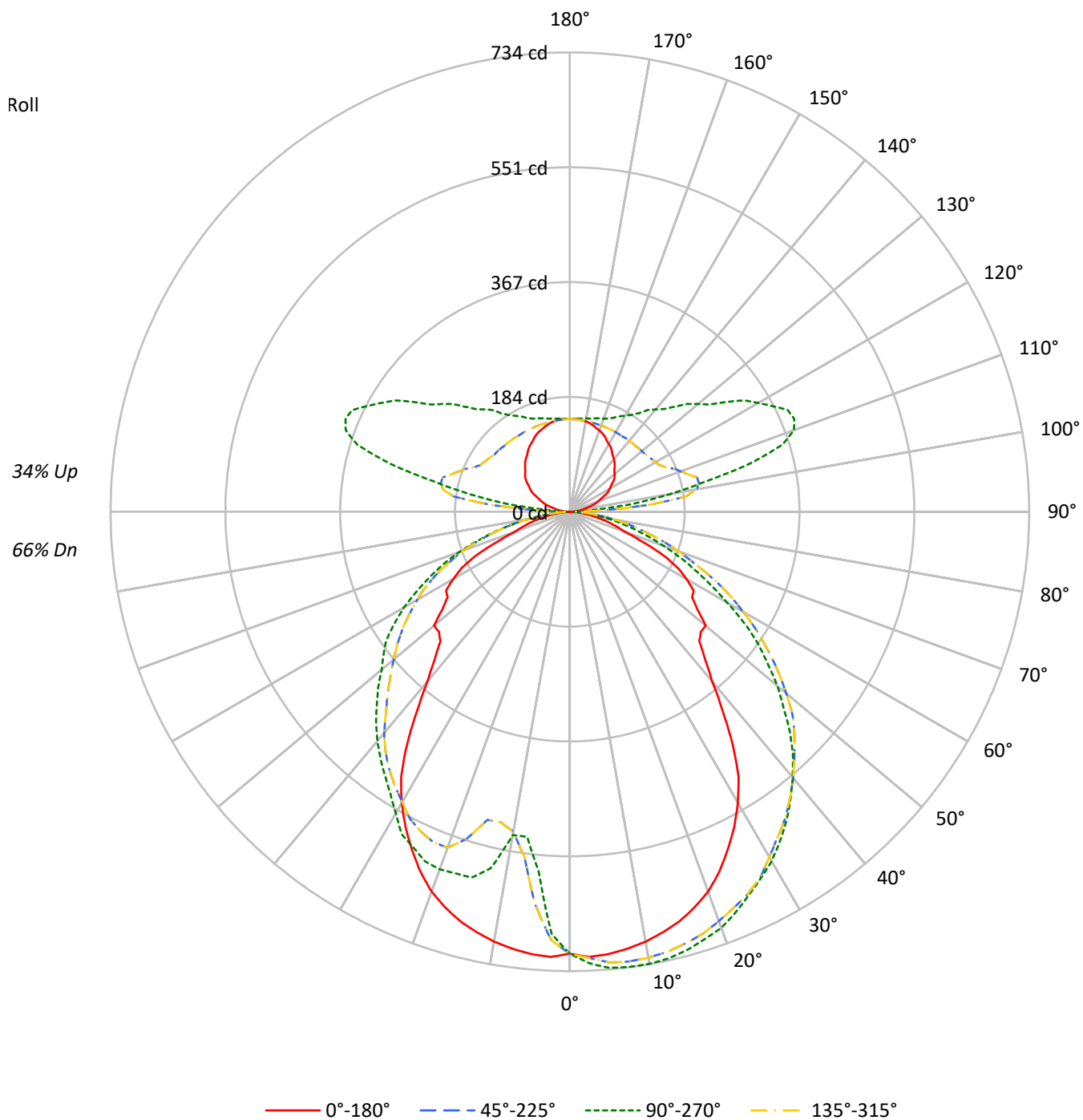
Lumens per Lamp: N/A  
Luminaire Lumens: 2794.8 lumens  
Efficiency: N/A  
Efficacy: 127.0 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: Semi-Direct

Input Watts (W): 22  
Input Voltage (V): NR  
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: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

### Luminous Intensity Polar Plot



TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**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   | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 104 | 92 | 92 | 92 | 81 | 81 | 81 | 70 | 70 | 70 | 66 |    |    |
| 1   | 101 | 97  | 93  | 89  | 95  | 91  | 88  | 85  | 81 | 78 | 76 | 71 | 69 | 68 | 62 | 61 | 60 | 55 |    |    |
| 2   | 92  | 85  | 78  | 73  | 87  | 80  | 74  | 70  | 71 | 67 | 63 | 63 | 59 | 56 | 55 | 52 | 50 | 46 |    |    |
| 3   | 84  | 75  | 67  | 61  | 79  | 70  | 64  | 58  | 63 | 57 | 53 | 55 | 51 | 48 | 49 | 46 | 43 | 39 |    |    |
| 4   | 77  | 66  | 58  | 52  | 72  | 62  | 55  | 49  | 56 | 50 | 45 | 49 | 45 | 41 | 43 | 40 | 37 | 34 |    |    |
| 5   | 71  | 59  | 50  | 44  | 66  | 56  | 48  | 43  | 50 | 44 | 39 | 44 | 39 | 35 | 39 | 35 | 32 | 29 |    |    |
| 6   | 65  | 53  | 45  | 39  | 61  | 50  | 43  | 37  | 45 | 39 | 34 | 40 | 35 | 31 | 35 | 31 | 28 | 26 |    |    |
| 7   | 60  | 48  | 40  | 34  | 57  | 45  | 38  | 33  | 41 | 35 | 30 | 36 | 31 | 28 | 32 | 28 | 25 | 23 |    |    |
| 8   | 56  | 43  | 35  | 30  | 53  | 41  | 34  | 29  | 37 | 31 | 27 | 33 | 28 | 25 | 30 | 26 | 22 | 20 |    |    |
| 9   | 52  | 40  | 32  | 27  | 49  | 38  | 31  | 26  | 34 | 28 | 24 | 31 | 26 | 22 | 27 | 23 | 20 | 18 |    |    |
| 10  | 49  | 36  | 29  | 24  | 46  | 35  | 28  | 23  | 31 | 26 | 22 | 28 | 23 | 20 | 25 | 21 | 18 | 16 |    |    |

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

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 6552 | 6552 | 6552 | 6552 |
| 5°  | 6593 | 6614 | 6593 | 5200 |
| 10° | 6542 | 6515 | 6542 | 4658 |
| 15° | 6463 | 6374 | 6463 | 5322 |
| 20° | 6321 | 6206 | 6321 | 5333 |
| 25° | 6037 | 5962 | 6037 | 5220 |
| 30° | 5672 | 5760 | 5672 | 4973 |
| 35° | 5050 | 5504 | 5050 | 4699 |
| 40° | 4200 | 5203 | 4200 | 4494 |
| 45° | 3745 | 4850 | 3745 | 4255 |
| 50° | 3971 | 4429 | 3971 | 4018 |
| 55° | 3724 | 3975 | 3724 | 3882 |
| 60° | 3826 | 3375 | 3826 | 3555 |
| 65° | 3451 | 2791 | 3451 | 3119 |
| 70° | 2374 | 2225 | 2374 | 2615 |
| 75° | 2056 | 1645 | 2056 | 1969 |
| 80° | 1629 | 1088 | 1629 | 1182 |
| 85° | 886  | 575  | 886  | 489  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 20°

Vertical Angle: 45°

Luminance: 5752 cd/sqm

TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 63.7   | 2.3       |
| 10°-20°   | 181.0  | 6.5       |
| 20°-30°   | 279.7  | 10.0      |
| 30°-40°   | 333.9  | 11.9      |
| 40°-50°   | 335.9  | 12.0      |
| 50°-60°   | 292.3  | 10.5      |
| 60°-70°   | 207.2  | 7.4       |
| 70°-80°   | 109.6  | 3.9       |
| 80°-90°   | 27.9   | 1.0       |
| 90°-100°  | 72.5   | 2.6       |
| 100°-110° | 190.5  | 6.8       |
| 110°-120° | 197.5  | 7.1       |
| 120°-130° | 158.4  | 5.7       |
| 130°-140° | 124.3  | 4.4       |
| 140°-150° | 95.4   | 3.4       |
| 150°-160° | 68.7   | 2.5       |
| 160°-170° | 42.0   | 1.5       |
| 170°-180° | 14.2   | 0.5       |
| 0°-30°    | 524.4  | 18.8      |
| 0°-40°    | 858.3  | 30.7      |
| 0°-60°    | 1486.5 | 53.2      |
| 0°-90°    | 1831.2 | 65.5      |
| 90°-120°  | 460.5  | 16.5      |
| 90°-150°  | 838.6  | 30.0      |
| 90°-180°  | 964.0  | 34.5      |
| 0°-180°   | 2794.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 90° | 180° | 270° | 360° | Flux |
|------|-----|-----|------|------|------|------|
| 0°   | 706 | 706 | 706  | 706  | 706  |      |
| 5°   | 709 | 732 | 709  | 575  | 709  | 67   |
| 15°  | 677 | 725 | 677  | 605  | 677  | 191  |
| 25°  | 596 | 676 | 596  | 592  | 596  | 274  |
| 35°  | 454 | 603 | 454  | 515  | 454  | 281  |
| 45°  | 292 | 497 | 292  | 436  | 292  | 234  |
| 55°  | 238 | 367 | 238  | 358  | 238  | 219  |
| 65°  | 166 | 221 | 166  | 247  | 166  | 158  |
| 75°  | 63  | 105 | 63   | 126  | 63   | 66   |
| 85°  | 11  | 27  | 11   | 23   | 11   | 14   |
| 90°  | 1   | 4   | 1    | 4    | 1    | 1    |
| 95°  | 10  | 44  | 10   | 44   | 10   | 11   |
| 105° | 34  | 298 | 34   | 298  | 34   | 36   |
| 115° | 61  | 384 | 61   | 384  | 61   | 60   |
| 125° | 85  | 306 | 85   | 306  | 85   | 75   |
| 135° | 101 | 237 | 101  | 237  | 101  | 78   |
| 145° | 117 | 192 | 117  | 192  | 117  | 73   |
| 155° | 132 | 166 | 132  | 166  | 132  | 61   |
| 165° | 143 | 154 | 143  | 154  | 143  | 40   |
| 175° | 149 | 150 | 149  | 150  | 149  | 14   |
| 180° | 149 | 149 | 149  | 149  | 149  |      |

TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 10°   | 20°   | 22.5° | 30°   | 40°   | 45°   | 50°   | 60°   | 67.5° | 70°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 706.1 | 706.1 | 706.1 | 706.1 | 706.1 | 706.1 | 706.1 | 706.1 | 706.1 | 706.1 | 706.1 |
| 2.5°   | 712.0 | 712.0 | 716.0 | 717.4 | 717.4 | 715.4 | 713.4 | 715.4 | 721.4 | 723.4 | 722.7 |
| 5°     | 709.4 | 714.7 | 722.1 | 723.4 | 724.8 | 724.1 | 722.7 | 724.1 | 730.8 | 732.1 | 732.8 |
| 7.5°   | 704.1 | 714.0 | 723.4 | 725.4 | 727.4 | 725.4 | 724.8 | 726.1 | 732.8 | 734.1 | 734.1 |
| 10°    | 697.4 | 711.3 | 722.1 | 723.4 | 725.4 | 723.4 | 723.4 | 726.1 | 732.8 | 734.1 | 734.7 |
| 12.5°  | 688.0 | 707.4 | 717.4 | 718.7 | 721.4 | 720.7 | 720.1 | 722.7 | 729.5 | 730.8 | 730.8 |
| 15°    | 677.3 | 700.0 | 709.4 | 710.7 | 715.4 | 714.0 | 714.0 | 716.7 | 724.1 | 726.1 | 725.4 |
| 17.5°  | 662.6 | 690.7 | 701.4 | 703.4 | 706.8 | 706.1 | 706.8 | 709.4 | 716.0 | 717.4 | 718.1 |
| 20°    | 645.9 | 678.0 | 690.7 | 692.7 | 696.0 | 696.0 | 696.0 | 699.4 | 706.1 | 708.8 | 708.8 |
| 22.5°  | 623.2 | 664.6 | 678.0 | 679.4 | 683.4 | 683.4 | 684.7 | 689.3 | 695.3 | 696.0 | 696.0 |
| 25°    | 596.5 | 649.9 | 661.2 | 665.3 | 669.3 | 671.3 | 673.3 | 676.0 | 678.0 | 677.3 | 678.0 |
| 27.5°  | 568.4 | 631.3 | 645.9 | 648.6 | 654.0 | 656.0 | 658.7 | 659.3 | 659.9 | 661.9 | 660.6 |
| 30°    | 537.0 | 605.2 | 627.2 | 629.9 | 638.5 | 639.9 | 637.2 | 638.5 | 641.9 | 643.2 | 644.6 |
| 32.5°  | 501.7 | 566.4 | 607.9 | 613.8 | 621.9 | 617.9 | 617.2 | 619.2 | 624.6 | 624.6 | 625.9 |
| 35°    | 453.6 | 536.3 | 589.8 | 595.2 | 601.2 | 596.5 | 599.2 | 599.8 | 603.2 | 605.2 | 604.5 |
| 37.5°  | 400.8 | 510.4 | 571.1 | 575.1 | 579.8 | 573.8 | 577.8 | 579.8 | 582.5 | 581.2 | 581.2 |
| 40°    | 354.0 | 469.6 | 549.1 | 551.8 | 555.8 | 551.1 | 555.1 | 556.5 | 557.8 | 556.5 | 555.8 |
| 42.5°  | 319.3 | 424.8 | 525.7 | 529.1 | 526.4 | 529.7 | 531.1 | 533.8 | 531.7 | 529.1 | 529.1 |
| 45°    | 292.5 | 412.8 | 500.3 | 504.3 | 500.3 | 505.7 | 507.7 | 507.7 | 501.7 | 500.3 | 499.6 |
| 47.5°  | 283.9 | 388.7 | 474.9 | 474.9 | 472.9 | 479.6 | 483.0 | 478.3 | 472.3 | 470.2 | 470.2 |
| 50°    | 283.3 | 362.0 | 440.2 | 437.5 | 446.9 | 454.9 | 451.6 | 446.9 | 442.2 | 434.9 | 434.9 |
| 52.5°  | 257.2 | 329.3 | 395.4 | 405.5 | 420.1 | 424.8 | 419.5 | 414.8 | 406.8 | 403.5 | 400.8 |
| 55°    | 238.4 | 295.2 | 354.7 | 374.7 | 390.1 | 396.1 | 386.0 | 381.4 | 369.4 | 367.4 | 366.0 |
| 57.5°  | 234.5 | 245.8 | 317.3 | 342.6 | 361.3 | 360.8 | 354.7 | 346.0 | 336.0 | 334.0 | 333.4 |
| 60°    | 215.1 | 177.7 | 277.2 | 307.3 | 326.6 | 324.6 | 319.3 | 311.2 | 301.9 | 300.6 | 299.3 |
| 62.5°  | 195.0 | 128.9 | 231.8 | 265.8 | 293.2 | 292.5 | 287.9 | 275.9 | 269.2 | 265.8 | 263.1 |
| 65°    | 165.6 | 108.2 | 165.0 | 221.1 | 260.6 | 261.8 | 251.8 | 243.1 | 235.8 | 231.8 | 231.1 |
| 67.5°  | 126.3 | 88.1  | 111.6 | 184.4 | 229.1 | 227.8 | 215.1 | 211.1 | 201.7 | 199.7 | 195.7 |
| 70°    | 93.5  | 58.8  | 77.5  | 149.6 | 198.4 | 195.0 | 185.1 | 180.4 | 171.7 | 167.0 | 164.3 |
| 72.5°  | 77.5  | 47.4  | 56.8  | 116.2 | 167.0 | 162.9 | 154.3 | 149.0 | 141.6 | 137.6 | 135.0 |
| 75°    | 62.7  | 50.1  | 43.4  | 86.2  | 135.6 | 133.0 | 124.9 | 119.5 | 113.5 | 108.2 | 108.9 |
| 77.5°  | 46.1  | 46.7  | 34.8  | 63.4  | 107.6 | 103.6 | 98.9  | 92.2  | 89.5  | 84.2  | 84.2  |
| 80°    | 34.8  | 36.8  | 26.1  | 43.4  | 77.5  | 77.5  | 73.5  | 68.8  | 64.1  | 61.5  | 61.5  |
| 82.5°  | 23.4  | 23.4  | 19.3  | 27.4  | 52.8  | 50.8  | 48.1  | 46.7  | 44.1  | 42.7  | 42.7  |
| 85°    | 10.7  | 13.3  | 12.1  | 16.7  | 28.7  | 30.1  | 30.1  | 28.7  | 28.1  | 26.7  | 27.4  |
| 87.5°  | 3.4   | 6.0   | 7.4   | 9.4   | 14.7  | 15.3  | 16.0  | 16.0  | 16.0  | 16.7  | 16.7  |
| 90°    | 1.0   | 1.8   | 2.6   | 2.8   | 4.4   | 6.5   | 7.6   | 6.8   | 5.1   | 3.8   | 3.8   |
| 92.5°  | 4.0   | 10.8  | 17.5  | 19.2  | 27.1  | 37.5  | 42.7  | 37.4  | 26.9  | 18.9  | 18.1  |
| 95°    | 9.6   | 22.0  | 34.5  | 37.5  | 66.6  | 105.4 | 124.8 | 111.4 | 84.5  | 64.3  | 62.1  |
| 97.5°  | 16.5  | 27.5  | 38.4  | 41.2  | 89.7  | 154.4 | 186.8 | 178.3 | 161.3 | 148.5 | 144.1 |
| 100°   | 21.9  | 31.9  | 41.8  | 44.3  | 98.1  | 169.9 | 205.8 | 206.4 | 207.7 | 208.6 | 203.4 |
| 102.5° | 26.5  | 35.8  | 45.1  | 47.4  | 102.0 | 174.8 | 211.2 | 222.0 | 243.6 | 259.9 | 255.4 |
| 105°   | 34.4  | 42.2  | 50.0  | 52.0  | 104.9 | 175.3 | 210.6 | 234.9 | 283.4 | 319.7 | 317.3 |
| 107.5° | 42.3  | 49.6  | 57.0  | 58.8  | 105.4 | 167.5 | 198.6 | 232.5 | 300.1 | 350.9 | 351.5 |
| 110°   | 47.7  | 54.3  | 60.9  | 62.5  | 104.6 | 160.7 | 188.6 | 226.5 | 302.1 | 358.9 | 361.3 |

TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 10°   | 20°   | 22.5° | 30°   | 40°   | 45°   | 50°   | 60°   | 67.5° | 70°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 53.0  | 59.3  | 65.5  | 67.1  | 104.6 | 154.6 | 179.6 | 218.3 | 295.7 | 353.8 | 357.6 |
| 115°   | 61.0  | 66.7  | 72.5  | 74.0  | 105.6 | 147.7 | 168.7 | 206.0 | 280.6 | 336.4 | 341.7 |
| 117.5° | 68.8  | 74.1  | 79.4  | 80.7  | 107.6 | 143.3 | 161.3 | 194.9 | 262.1 | 312.6 | 318.5 |
| 120°   | 73.4  | 78.4  | 83.4  | 84.6  | 109.1 | 141.8 | 158.2 | 188.9 | 250.5 | 296.6 | 302.3 |
| 122.5° | 77.9  | 82.9  | 87.8  | 89.1  | 111.4 | 141.0 | 155.9 | 183.6 | 238.9 | 280.5 | 286.1 |
| 125°   | 84.8  | 89.3  | 93.9  | 95.1  | 114.5 | 140.4 | 153.4 | 176.9 | 224.0 | 259.3 | 264.4 |
| 127.5° | 90.3  | 95.0  | 99.6  | 100.8 | 117.6 | 140.0 | 151.3 | 171.5 | 211.9 | 242.2 | 246.6 |
| 130°   | 93.3  | 98.3  | 103.3 | 104.6 | 119.9 | 140.3 | 150.5 | 168.5 | 204.5 | 231.5 | 235.5 |
| 132.5° | 96.5  | 101.5 | 106.5 | 107.7 | 121.7 | 140.4 | 149.8 | 165.9 | 198.1 | 222.3 | 225.9 |
| 135°   | 101.1 | 105.6 | 110.2 | 111.3 | 123.7 | 140.3 | 148.6 | 162.0 | 189.0 | 209.3 | 212.3 |
| 137.5° | 105.8 | 110.3 | 114.7 | 115.8 | 126.7 | 141.1 | 148.4 | 159.8 | 182.6 | 199.7 | 202.3 |
| 140°   | 109.7 | 113.7 | 117.9 | 118.9 | 128.5 | 141.3 | 147.7 | 157.6 | 177.3 | 192.0 | 194.4 |
| 142.5° | 112.6 | 116.4 | 120.2 | 121.2 | 130.1 | 141.8 | 147.7 | 156.4 | 173.7 | 186.7 | 188.7 |
| 145°   | 117.2 | 120.5 | 123.9 | 124.7 | 132.1 | 141.8 | 146.7 | 153.8 | 167.9 | 178.6 | 180.2 |
| 147.5° | 121.8 | 125.0 | 128.3 | 129.1 | 135.0 | 142.8 | 146.7 | 152.3 | 163.4 | 171.8 | 173.1 |
| 150°   | 124.8 | 127.7 | 130.7 | 131.4 | 136.5 | 143.3 | 146.7 | 151.4 | 160.9 | 167.9 | 168.9 |
| 152.5° | 127.9 | 130.1 | 132.3 | 132.9 | 137.4 | 143.6 | 146.7 | 150.7 | 158.8 | 164.8 | 165.6 |
| 155°   | 132.5 | 134.1 | 135.8 | 136.2 | 139.6 | 144.3 | 146.7 | 149.9 | 156.4 | 161.2 | 161.7 |
| 157.5° | 135.9 | 137.4 | 139.0 | 139.4 | 141.8 | 145.1 | 146.7 | 149.2 | 154.2 | 157.9 | 158.3 |
| 160°   | 138.1 | 139.3 | 140.6 | 140.9 | 142.8 | 145.4 | 146.7 | 148.8 | 153.1 | 156.3 | 156.5 |
| 162.5° | 140.4 | 141.3 | 142.3 | 142.5 | 143.9 | 145.8 | 146.7 | 148.5 | 152.1 | 154.8 | 155.0 |
| 165°   | 142.9 | 143.7 | 144.6 | 144.8 | 145.4 | 146.3 | 146.7 | 148.0 | 150.6 | 152.5 | 152.7 |
| 167.5° | 145.2 | 145.6 | 146.0 | 146.1 | 146.6 | 147.3 | 147.7 | 148.5 | 150.2 | 151.5 | 151.6 |
| 170°   | 146.7 | 147.1 | 147.5 | 147.6 | 147.6 | 147.7 | 147.7 | 148.5 | 150.2 | 151.5 | 151.5 |
| 172.5° | 147.5 | 147.6 | 147.7 | 147.7 | 147.7 | 147.7 | 147.7 | 148.4 | 149.7 | 150.7 | 150.6 |
| 175°   | 148.6 | 148.6 | 148.6 | 148.6 | 148.3 | 147.9 | 147.7 | 148.1 | 149.0 | 149.6 | 149.6 |
| 177.5° | 148.6 | 148.6 | 148.6 | 148.6 | 148.4 | 148.1 | 147.9 | 148.2 | 148.9 | 149.4 | 149.3 |
| 180°   | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 |

TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

|        | 80°   | 90°   | 100°  | 110°  | 112.5° | 120°  | 130°  | 135°  | 140°  | 150°  | 157.5° |
|--------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|--------|
| 0°     | 706.1 | 706.1 | 706.1 | 706.1 | 706.1  | 706.1 | 706.1 | 706.1 | 706.1 | 706.1 | 706.1  |
| 2.5°   | 724.1 | 722.1 | 724.1 | 722.7 | 723.4  | 721.4 | 715.4 | 713.4 | 715.4 | 717.4 | 717.4  |
| 5°     | 732.8 | 731.5 | 732.8 | 732.8 | 732.1  | 730.8 | 724.1 | 722.7 | 724.1 | 724.8 | 723.4  |
| 7.5°   | 735.4 | 733.5 | 735.4 | 734.1 | 734.1  | 732.8 | 726.1 | 724.8 | 725.4 | 727.4 | 725.4  |
| 10°    | 735.4 | 733.5 | 735.4 | 734.7 | 734.1  | 732.8 | 726.1 | 723.4 | 723.4 | 725.4 | 723.4  |
| 12.5°  | 732.1 | 730.8 | 732.1 | 730.8 | 730.8  | 729.5 | 722.7 | 720.1 | 720.7 | 721.4 | 718.7  |
| 15°    | 726.8 | 724.8 | 726.8 | 725.4 | 726.1  | 724.1 | 716.7 | 714.0 | 714.0 | 715.4 | 710.7  |
| 17.5°  | 718.7 | 716.0 | 718.7 | 718.1 | 717.4  | 716.0 | 709.4 | 706.8 | 706.1 | 706.8 | 703.4  |
| 20°    | 709.4 | 707.4 | 709.4 | 708.8 | 708.8  | 706.1 | 699.4 | 696.0 | 696.0 | 696.0 | 692.7  |
| 22.5°  | 694.7 | 692.7 | 694.7 | 696.0 | 696.0  | 695.3 | 689.3 | 684.7 | 683.4 | 683.4 | 679.4  |
| 25°    | 678.0 | 676.0 | 678.0 | 678.0 | 677.3  | 678.0 | 676.0 | 673.3 | 671.3 | 669.3 | 665.3  |
| 27.5°  | 661.9 | 660.6 | 661.9 | 660.6 | 661.9  | 659.9 | 659.3 | 658.7 | 656.0 | 654.0 | 648.6  |
| 30°    | 645.9 | 644.6 | 645.9 | 644.6 | 643.2  | 641.9 | 638.5 | 637.2 | 639.9 | 638.5 | 629.9  |
| 32.5°  | 625.9 | 624.6 | 625.9 | 625.9 | 624.6  | 624.6 | 619.2 | 617.2 | 617.9 | 621.9 | 613.8  |
| 35°    | 605.2 | 603.2 | 605.2 | 604.5 | 605.2  | 603.2 | 599.8 | 599.2 | 596.5 | 601.2 | 595.2  |
| 37.5°  | 581.2 | 579.2 | 581.2 | 581.2 | 581.2  | 582.5 | 579.8 | 577.8 | 573.8 | 579.8 | 575.1  |
| 40°    | 556.5 | 553.8 | 556.5 | 555.8 | 556.5  | 557.8 | 556.5 | 555.1 | 551.1 | 555.8 | 551.8  |
| 42.5°  | 528.4 | 527.7 | 528.4 | 529.1 | 529.1  | 531.7 | 533.8 | 531.1 | 529.7 | 526.4 | 529.1  |
| 45°    | 498.3 | 497.0 | 498.3 | 499.6 | 500.3  | 501.7 | 507.7 | 507.7 | 505.7 | 500.3 | 504.3  |
| 47.5°  | 466.2 | 462.9 | 466.2 | 470.2 | 470.2  | 472.3 | 478.3 | 483.0 | 479.6 | 472.9 | 474.9  |
| 50°    | 432.2 | 432.9 | 432.2 | 434.9 | 434.9  | 442.2 | 446.9 | 451.6 | 454.9 | 446.9 | 437.5  |
| 52.5°  | 398.8 | 398.1 | 398.8 | 400.8 | 403.5  | 406.8 | 414.8 | 419.5 | 424.8 | 420.1 | 405.5  |
| 55°    | 365.3 | 366.7 | 365.3 | 366.0 | 367.4  | 369.4 | 381.4 | 386.0 | 396.1 | 390.1 | 374.7  |
| 57.5°  | 332.0 | 330.0 | 332.0 | 333.4 | 334.0  | 336.0 | 346.0 | 354.7 | 360.8 | 361.3 | 342.6  |
| 60°    | 293.2 | 290.5 | 293.2 | 299.3 | 300.6  | 301.9 | 311.2 | 319.3 | 324.6 | 326.6 | 307.3  |
| 62.5°  | 259.2 | 254.5 | 259.2 | 263.1 | 265.8  | 269.2 | 275.9 | 287.9 | 292.5 | 293.2 | 265.8  |
| 65°    | 223.1 | 221.1 | 223.1 | 231.1 | 231.8  | 235.8 | 243.1 | 251.8 | 261.8 | 260.6 | 221.1  |
| 67.5°  | 190.3 | 190.3 | 190.3 | 195.7 | 199.7  | 201.7 | 211.1 | 215.1 | 227.8 | 229.1 | 184.4  |
| 70°    | 160.4 | 159.7 | 160.4 | 164.3 | 167.0  | 171.7 | 180.4 | 185.1 | 195.0 | 198.4 | 149.6  |
| 72.5°  | 131.6 | 130.9 | 131.6 | 135.0 | 137.6  | 141.6 | 149.0 | 154.3 | 162.9 | 167.0 | 116.2  |
| 75°    | 106.2 | 104.9 | 106.2 | 108.9 | 108.2  | 113.5 | 119.5 | 124.9 | 133.0 | 135.6 | 86.2   |
| 77.5°  | 81.5  | 81.5  | 81.5  | 84.2  | 84.2   | 89.5  | 92.2  | 98.9  | 103.6 | 107.6 | 63.4   |
| 80°    | 60.8  | 60.2  | 60.8  | 61.5  | 61.5   | 64.1  | 68.8  | 73.5  | 77.5  | 77.5  | 43.4   |
| 82.5°  | 42.7  | 41.4  | 42.7  | 42.7  | 42.7   | 44.1  | 46.7  | 48.1  | 50.8  | 52.8  | 27.4   |
| 85°    | 26.7  | 26.7  | 26.7  | 27.4  | 26.7   | 28.1  | 28.7  | 30.1  | 30.1  | 28.7  | 16.7   |
| 87.5°  | 17.3  | 16.7  | 17.3  | 16.7  | 16.7   | 16.0  | 16.0  | 16.0  | 15.3  | 14.7  | 9.4    |
| 90°    | 3.8   | 3.8   | 3.8   | 3.8   | 3.8    | 5.1   | 6.8   | 7.6   | 6.5   | 4.4   | 2.8    |
| 92.5°  | 15.1  | 12.2  | 15.1  | 18.1  | 18.9   | 26.9  | 37.4  | 42.7  | 37.5  | 27.1  | 19.2   |
| 95°    | 53.0  | 43.8  | 53.0  | 62.1  | 64.3   | 84.5  | 111.4 | 124.8 | 105.4 | 66.6  | 37.5   |
| 97.5°  | 126.8 | 109.5 | 126.8 | 144.1 | 148.5  | 161.3 | 178.3 | 186.8 | 154.4 | 89.7  | 41.2   |
| 100°   | 182.8 | 162.0 | 182.8 | 203.4 | 208.6  | 207.7 | 206.4 | 205.8 | 169.9 | 98.1  | 44.3   |
| 102.5° | 237.6 | 219.9 | 237.6 | 255.4 | 259.9  | 243.6 | 222.0 | 211.2 | 174.8 | 102.0 | 47.4   |
| 105°   | 307.9 | 298.3 | 307.9 | 317.3 | 319.7  | 283.4 | 234.9 | 210.6 | 175.3 | 104.9 | 52.0   |
| 107.5° | 353.8 | 356.1 | 353.8 | 351.5 | 350.9  | 300.1 | 232.5 | 198.6 | 167.5 | 105.4 | 58.8   |
| 110°   | 371.2 | 381.2 | 371.2 | 361.3 | 358.9  | 302.1 | 226.5 | 188.6 | 160.7 | 104.6 | 62.5   |



TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

|        | 80°   | 90°   | 100°  | 110°  | 112.5° | 120°  | 130°  | 135°  | 140°  | 150°  | 157.5° |
|--------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|--------|
| 112.5° | 372.8 | 388.0 | 372.8 | 357.6 | 353.8  | 295.7 | 218.3 | 179.6 | 154.6 | 104.6 | 67.1   |
| 115°   | 362.9 | 384.1 | 362.9 | 341.7 | 336.4  | 280.6 | 206.0 | 168.7 | 147.7 | 105.6 | 74.0   |
| 117.5° | 341.9 | 365.4 | 341.9 | 318.5 | 312.6  | 262.1 | 194.9 | 161.3 | 143.3 | 107.6 | 80.7   |
| 120°   | 325.1 | 347.8 | 325.1 | 302.3 | 296.6  | 250.5 | 188.9 | 158.2 | 141.8 | 109.1 | 84.6   |
| 122.5° | 308.6 | 331.1 | 308.6 | 286.1 | 280.5  | 238.9 | 183.6 | 155.9 | 141.0 | 111.4 | 89.1   |
| 125°   | 285.2 | 305.9 | 285.2 | 264.4 | 259.3  | 224.0 | 176.9 | 153.4 | 140.4 | 114.5 | 95.1   |
| 127.5° | 264.0 | 281.5 | 264.0 | 246.6 | 242.2  | 211.9 | 171.5 | 151.3 | 140.0 | 117.6 | 100.8  |
| 130°   | 251.6 | 267.7 | 251.6 | 235.5 | 231.5  | 204.5 | 168.5 | 150.5 | 140.3 | 119.9 | 104.6  |
| 132.5° | 240.3 | 254.8 | 240.3 | 225.9 | 222.3  | 198.1 | 165.9 | 149.8 | 140.4 | 121.7 | 107.7  |
| 135°   | 224.9 | 237.3 | 224.9 | 212.3 | 209.3  | 189.0 | 162.0 | 148.6 | 140.3 | 123.7 | 111.3  |
| 137.5° | 212.4 | 222.7 | 212.4 | 202.3 | 199.7  | 182.6 | 159.8 | 148.4 | 141.1 | 126.7 | 115.8  |
| 140°   | 203.9 | 213.4 | 203.9 | 194.4 | 192.0  | 177.3 | 157.6 | 147.7 | 141.3 | 128.5 | 118.9  |
| 142.5° | 196.9 | 205.1 | 196.9 | 188.7 | 186.7  | 173.7 | 156.4 | 147.7 | 141.8 | 130.1 | 121.2  |
| 145°   | 186.4 | 192.5 | 186.4 | 180.2 | 178.6  | 167.9 | 153.8 | 146.7 | 141.8 | 132.1 | 124.7  |
| 147.5° | 178.2 | 183.4 | 178.2 | 173.1 | 171.8  | 163.4 | 152.3 | 146.7 | 142.8 | 135.0 | 129.1  |
| 150°   | 173.1 | 177.3 | 173.1 | 168.9 | 167.9  | 160.9 | 151.4 | 146.7 | 143.3 | 136.5 | 131.4  |
| 152.5° | 168.7 | 171.9 | 168.7 | 165.6 | 164.8  | 158.8 | 150.7 | 146.7 | 143.6 | 137.4 | 132.9  |
| 155°   | 163.7 | 165.8 | 163.7 | 161.7 | 161.2  | 156.4 | 149.9 | 146.7 | 144.3 | 139.6 | 136.2  |
| 157.5° | 159.8 | 161.3 | 159.8 | 158.3 | 157.9  | 154.2 | 149.2 | 146.7 | 145.1 | 141.8 | 139.4  |
| 160°   | 157.4 | 158.2 | 157.4 | 156.5 | 156.3  | 153.1 | 148.8 | 146.7 | 145.4 | 142.8 | 140.9  |
| 162.5° | 155.8 | 156.6 | 155.8 | 155.0 | 154.8  | 152.1 | 148.5 | 146.7 | 145.8 | 143.9 | 142.5  |
| 165°   | 153.6 | 154.4 | 153.6 | 152.7 | 152.5  | 150.6 | 148.0 | 146.7 | 146.3 | 145.4 | 144.8  |
| 167.5° | 151.9 | 152.3 | 151.9 | 151.6 | 151.5  | 150.2 | 148.5 | 147.7 | 147.3 | 146.6 | 146.1  |
| 170°   | 151.5 | 151.5 | 151.5 | 151.5 | 151.5  | 150.2 | 148.5 | 147.7 | 147.7 | 147.6 | 147.6  |
| 172.5° | 150.3 | 150.0 | 150.3 | 150.6 | 150.7  | 149.7 | 148.4 | 147.7 | 147.7 | 147.7 | 147.7  |
| 175°   | 149.6 | 149.6 | 149.6 | 149.6 | 149.6  | 149.0 | 148.1 | 147.7 | 147.9 | 148.3 | 148.6  |
| 177.5° | 149.0 | 148.6 | 149.0 | 149.3 | 149.4  | 148.9 | 148.2 | 147.9 | 148.1 | 148.4 | 148.6  |
| 180°   | 148.6 | 148.6 | 148.6 | 148.6 | 148.6  | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6  |

TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

|        | 160°  | 170°  | 180°  | 190°  | 200°  | 202.5° | 210°  | 220°  | 225°  | 230°  | 240°  |
|--------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 0°     | 706.1 | 706.1 | 706.1 | 706.1 | 706.1 | 706.1  | 706.1 | 706.1 | 706.1 | 706.1 | 706.1 |
| 2.5°   | 716.0 | 712.0 | 712.0 | 705.4 | 702.7 | 700.7  | 697.4 | 687.3 | 684.7 | 682.0 | 686.0 |
| 5°     | 722.1 | 714.7 | 709.4 | 697.4 | 687.3 | 683.4  | 670.6 | 646.6 | 630.6 | 618.5 | 611.8 |
| 7.5°   | 723.4 | 714.0 | 704.1 | 685.3 | 661.2 | 650.6  | 611.8 | 567.8 | 555.8 | 545.1 | 538.3 |
| 10°    | 722.1 | 711.3 | 697.4 | 669.3 | 612.5 | 593.8  | 555.1 | 526.4 | 519.0 | 517.0 | 519.0 |
| 12.5°  | 717.4 | 707.4 | 688.0 | 641.2 | 561.7 | 549.1  | 526.4 | 509.7 | 508.4 | 511.6 | 529.7 |
| 15°    | 709.4 | 700.0 | 677.3 | 603.9 | 533.8 | 524.4  | 508.4 | 502.3 | 509.7 | 533.1 | 587.1 |
| 17.5°  | 701.4 | 690.7 | 662.6 | 567.1 | 512.3 | 505.7  | 494.3 | 506.4 | 547.7 | 579.2 | 597.2 |
| 20°    | 690.7 | 678.0 | 645.9 | 540.4 | 497.0 | 490.9  | 485.6 | 539.7 | 571.1 | 582.5 | 592.5 |
| 22.5°  | 678.0 | 664.6 | 623.2 | 521.7 | 481.0 | 476.3  | 479.6 | 558.5 | 571.1 | 579.2 | 587.8 |
| 25°    | 661.2 | 649.9 | 596.5 | 507.0 | 468.2 | 462.9  | 475.6 | 556.5 | 563.7 | 565.7 | 583.2 |
| 27.5°  | 645.9 | 631.3 | 568.4 | 493.6 | 452.9 | 450.9  | 479.0 | 547.7 | 553.1 | 555.1 | 573.8 |
| 30°    | 627.2 | 605.2 | 537.0 | 479.6 | 436.8 | 436.1  | 479.6 | 537.0 | 535.7 | 541.0 | 559.8 |
| 32.5°  | 607.9 | 566.4 | 501.7 | 462.2 | 421.5 | 420.8  | 474.9 | 521.0 | 519.7 | 527.0 | 541.0 |
| 35°    | 589.8 | 536.3 | 453.6 | 442.2 | 402.1 | 402.8  | 463.5 | 502.3 | 503.0 | 509.7 | 518.3 |
| 37.5°  | 571.1 | 510.4 | 400.8 | 420.1 | 383.5 | 383.5  | 448.2 | 485.0 | 483.7 | 485.6 | 497.6 |
| 40°    | 549.1 | 469.6 | 354.0 | 391.4 | 366.0 | 364.0  | 429.5 | 466.2 | 461.5 | 460.9 | 477.6 |
| 42.5°  | 525.7 | 424.8 | 319.3 | 353.4 | 346.0 | 343.3  | 406.8 | 443.5 | 434.9 | 436.8 | 458.3 |
| 45°    | 500.3 | 412.8 | 292.5 | 298.6 | 325.3 | 323.3  | 382.1 | 417.5 | 411.4 | 416.8 | 438.8 |
| 47.5°  | 474.9 | 388.7 | 283.9 | 247.8 | 303.3 | 302.6  | 354.7 | 392.1 | 388.7 | 394.1 | 417.5 |
| 50°    | 440.2 | 362.0 | 283.3 | 212.4 | 278.6 | 281.2  | 322.0 | 367.4 | 367.4 | 372.1 | 396.8 |
| 52.5°  | 395.4 | 329.3 | 257.2 | 192.3 | 249.8 | 257.9  | 293.2 | 346.0 | 347.3 | 352.0 | 374.1 |
| 55°    | 354.7 | 295.2 | 238.4 | 177.0 | 215.7 | 233.2  | 265.1 | 324.0 | 326.6 | 331.3 | 351.4 |
| 57.5°  | 317.3 | 245.8 | 234.5 | 159.0 | 184.4 | 201.1  | 240.4 | 302.6 | 303.9 | 308.0 | 327.3 |
| 60°    | 277.2 | 177.7 | 215.1 | 139.6 | 157.0 | 169.6  | 217.7 | 277.2 | 281.9 | 284.6 | 301.3 |
| 62.5°  | 231.8 | 128.9 | 195.0 | 126.3 | 143.6 | 146.3  | 199.1 | 253.2 | 259.2 | 261.2 | 271.2 |
| 65°    | 165.0 | 108.2 | 165.6 | 114.9 | 129.6 | 130.3  | 179.0 | 228.5 | 233.8 | 237.1 | 244.5 |
| 67.5°  | 111.6 | 88.1  | 126.3 | 104.2 | 118.9 | 119.5  | 159.7 | 199.7 | 207.1 | 209.8 | 214.4 |
| 70°    | 77.5  | 58.8  | 93.5  | 92.8  | 106.9 | 108.2  | 138.9 | 173.7 | 180.4 | 182.4 | 185.1 |
| 72.5°  | 56.8  | 47.4  | 77.5  | 83.5  | 94.2  | 95.5   | 117.5 | 144.3 | 151.0 | 153.0 | 154.3 |
| 75°    | 43.4  | 50.1  | 62.7  | 72.8  | 80.2  | 80.8   | 96.2  | 117.5 | 122.2 | 123.6 | 124.2 |
| 77.5°  | 34.8  | 46.7  | 46.1  | 58.8  | 65.4  | 64.1   | 75.5  | 90.8  | 94.8  | 94.8  | 94.8  |
| 80°    | 26.1  | 36.8  | 34.8  | 42.1  | 48.1  | 46.7   | 54.1  | 64.8  | 66.1  | 67.4  | 66.8  |
| 82.5°  | 19.3  | 23.4  | 23.4  | 26.7  | 32.1  | 30.8   | 36.1  | 42.1  | 42.1  | 42.1  | 43.4  |
| 85°    | 12.1  | 13.3  | 10.7  | 14.0  | 18.0  | 17.3   | 20.0  | 22.7  | 23.4  | 23.4  | 22.0  |
| 87.5°  | 7.4   | 6.0   | 3.4   | 5.4   | 8.0   | 8.0    | 9.4   | 10.1  | 9.4   | 9.4   | 9.4   |
| 90°    | 2.6   | 1.8   | 1.0   | 1.8   | 2.6   | 2.8    | 4.4   | 6.5   | 7.6   | 6.8   | 5.1   |
| 92.5°  | 17.5  | 10.8  | 4.0   | 10.8  | 17.5  | 19.2   | 27.1  | 37.5  | 42.7  | 37.4  | 26.9  |
| 95°    | 34.5  | 22.0  | 9.6   | 22.0  | 34.5  | 37.5   | 66.6  | 105.4 | 124.8 | 111.4 | 84.5  |
| 97.5°  | 38.4  | 27.5  | 16.5  | 27.5  | 38.4  | 41.2   | 89.7  | 154.4 | 186.8 | 178.3 | 161.3 |
| 100°   | 41.8  | 31.9  | 21.9  | 31.9  | 41.8  | 44.3   | 98.1  | 169.9 | 205.8 | 206.4 | 207.7 |
| 102.5° | 45.1  | 35.8  | 26.5  | 35.8  | 45.1  | 47.4   | 102.0 | 174.8 | 211.2 | 222.0 | 243.6 |
| 105°   | 50.0  | 42.2  | 34.4  | 42.2  | 50.0  | 52.0   | 104.9 | 175.3 | 210.6 | 234.9 | 283.4 |
| 107.5° | 57.0  | 49.6  | 42.3  | 49.6  | 57.0  | 58.8   | 105.4 | 167.5 | 198.6 | 232.5 | 300.1 |
| 110°   | 60.9  | 54.3  | 47.7  | 54.3  | 60.9  | 62.5   | 104.6 | 160.7 | 188.6 | 226.5 | 302.1 |

TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

|        | 160°  | 170°  | 180°  | 190°  | 200°  | 202.5° | 210°  | 220°  | 225°  | 230°  | 240°  |
|--------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 112.5° | 65.5  | 59.3  | 53.0  | 59.3  | 65.5  | 67.1   | 104.6 | 154.6 | 179.6 | 218.3 | 295.7 |
| 115°   | 72.5  | 66.7  | 61.0  | 66.7  | 72.5  | 74.0   | 105.6 | 147.7 | 168.7 | 206.0 | 280.6 |
| 117.5° | 79.4  | 74.1  | 68.8  | 74.1  | 79.4  | 80.7   | 107.6 | 143.3 | 161.3 | 194.9 | 262.1 |
| 120°   | 83.4  | 78.4  | 73.4  | 78.4  | 83.4  | 84.6   | 109.1 | 141.8 | 158.2 | 188.9 | 250.5 |
| 122.5° | 87.8  | 82.9  | 77.9  | 82.9  | 87.8  | 89.1   | 111.4 | 141.0 | 155.9 | 183.6 | 238.9 |
| 125°   | 93.9  | 89.3  | 84.8  | 89.3  | 93.9  | 95.1   | 114.5 | 140.4 | 153.4 | 176.9 | 224.0 |
| 127.5° | 99.6  | 95.0  | 90.3  | 95.0  | 99.6  | 100.8  | 117.6 | 140.0 | 151.3 | 171.5 | 211.9 |
| 130°   | 103.3 | 98.3  | 93.3  | 98.3  | 103.3 | 104.6  | 119.9 | 140.3 | 150.5 | 168.5 | 204.5 |
| 132.5° | 106.5 | 101.5 | 96.5  | 101.5 | 106.5 | 107.7  | 121.7 | 140.4 | 149.8 | 165.9 | 198.1 |
| 135°   | 110.2 | 105.6 | 101.1 | 105.6 | 110.2 | 111.3  | 123.7 | 140.3 | 148.6 | 162.0 | 189.0 |
| 137.5° | 114.7 | 110.3 | 105.8 | 110.3 | 114.7 | 115.8  | 126.7 | 141.1 | 148.4 | 159.8 | 182.6 |
| 140°   | 117.9 | 113.7 | 109.7 | 113.7 | 117.9 | 118.9  | 128.5 | 141.3 | 147.7 | 157.6 | 177.3 |
| 142.5° | 120.2 | 116.4 | 112.6 | 116.4 | 120.2 | 121.2  | 130.1 | 141.8 | 147.7 | 156.4 | 173.7 |
| 145°   | 123.9 | 120.5 | 117.2 | 120.5 | 123.9 | 124.7  | 132.1 | 141.8 | 146.7 | 153.8 | 167.9 |
| 147.5° | 128.3 | 125.0 | 121.8 | 125.0 | 128.3 | 129.1  | 135.0 | 142.8 | 146.7 | 152.3 | 163.4 |
| 150°   | 130.7 | 127.7 | 124.8 | 127.7 | 130.7 | 131.4  | 136.5 | 143.3 | 146.7 | 151.4 | 160.9 |
| 152.5° | 132.3 | 130.1 | 127.9 | 130.1 | 132.3 | 132.9  | 137.4 | 143.6 | 146.7 | 150.7 | 158.8 |
| 155°   | 135.8 | 134.1 | 132.5 | 134.1 | 135.8 | 136.2  | 139.6 | 144.3 | 146.7 | 149.9 | 156.4 |
| 157.5° | 139.0 | 137.4 | 135.9 | 137.4 | 139.0 | 139.4  | 141.8 | 145.1 | 146.7 | 149.2 | 154.2 |
| 160°   | 140.6 | 139.3 | 138.1 | 139.3 | 140.6 | 140.9  | 142.8 | 145.4 | 146.7 | 148.8 | 153.1 |
| 162.5° | 142.3 | 141.3 | 140.4 | 141.3 | 142.3 | 142.5  | 143.9 | 145.8 | 146.7 | 148.5 | 152.1 |
| 165°   | 144.6 | 143.7 | 142.9 | 143.7 | 144.6 | 144.8  | 145.4 | 146.3 | 146.7 | 148.0 | 150.6 |
| 167.5° | 146.0 | 145.6 | 145.2 | 145.6 | 146.0 | 146.1  | 146.6 | 147.3 | 147.7 | 148.5 | 150.2 |
| 170°   | 147.5 | 147.1 | 146.7 | 147.1 | 147.5 | 147.6  | 147.6 | 147.7 | 147.7 | 148.5 | 150.2 |
| 172.5° | 147.7 | 147.6 | 147.5 | 147.6 | 147.7 | 147.7  | 147.7 | 147.7 | 147.7 | 148.4 | 149.7 |
| 175°   | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6  | 148.3 | 147.9 | 147.7 | 148.1 | 149.0 |
| 177.5° | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6  | 148.4 | 148.1 | 147.9 | 148.2 | 148.9 |
| 180°   | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6  | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 |

TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 250°  | 260°  | 270°  | 280°  | 290°  | 292.5° | 300°  | 310°  | 315°  | 320°  |
|--------|--------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|
| 0°     | 706.1  | 706.1 | 706.1 | 706.1 | 706.1 | 706.1 | 706.1  | 706.1 | 706.1 | 706.1 | 706.1 |
| 2.5°   | 681.4  | 679.4 | 682.0 | 674.7 | 682.0 | 679.4 | 681.4  | 686.0 | 682.0 | 684.7 | 687.3 |
| 5°     | 597.8  | 594.5 | 583.9 | 575.1 | 583.9 | 594.5 | 597.8  | 611.8 | 618.5 | 630.6 | 646.6 |
| 7.5°   | 534.4  | 531.7 | 529.1 | 523.7 | 529.1 | 531.7 | 534.4  | 538.3 | 545.1 | 555.8 | 567.8 |
| 10°    | 520.3  | 521.0 | 525.0 | 524.4 | 525.0 | 521.0 | 520.3  | 519.0 | 517.0 | 519.0 | 526.4 |
| 12.5°  | 556.5  | 562.4 | 584.5 | 583.2 | 584.5 | 562.4 | 556.5  | 529.7 | 511.6 | 508.4 | 509.7 |
| 15°    | 597.8  | 599.8 | 604.5 | 605.2 | 604.5 | 599.8 | 597.8  | 587.1 | 533.1 | 509.7 | 502.3 |
| 17.5°  | 601.9  | 602.5 | 605.9 | 605.9 | 605.9 | 602.5 | 601.9  | 597.2 | 579.2 | 547.7 | 506.4 |
| 20°    | 598.5  | 599.8 | 606.6 | 607.9 | 606.6 | 599.8 | 598.5  | 592.5 | 582.5 | 571.1 | 539.7 |
| 22.5°  | 597.2  | 599.8 | 605.2 | 604.5 | 605.2 | 599.8 | 597.2  | 587.8 | 579.2 | 571.1 | 558.5 |
| 25°    | 590.5  | 590.5 | 591.1 | 591.8 | 591.1 | 590.5 | 590.5  | 583.2 | 565.7 | 563.7 | 556.5 |
| 27.5°  | 576.5  | 577.8 | 581.8 | 581.2 | 581.8 | 577.8 | 576.5  | 573.8 | 555.1 | 553.1 | 547.7 |
| 30°    | 563.7  | 562.4 | 559.1 | 556.5 | 559.1 | 562.4 | 563.7  | 559.8 | 541.0 | 535.7 | 537.0 |
| 32.5°  | 542.4  | 539.0 | 535.7 | 533.8 | 535.7 | 539.0 | 542.4  | 541.0 | 527.0 | 519.7 | 521.0 |
| 35°    | 517.0  | 517.7 | 517.0 | 515.0 | 517.0 | 517.7 | 517.0  | 518.3 | 509.7 | 503.0 | 502.3 |
| 37.5°  | 499.0  | 500.3 | 499.6 | 497.0 | 499.6 | 500.3 | 499.0  | 497.6 | 485.6 | 483.7 | 485.0 |
| 40°    | 480.3  | 481.0 | 480.3 | 478.3 | 480.3 | 481.0 | 480.3  | 477.6 | 460.9 | 461.5 | 466.2 |
| 42.5°  | 462.2  | 461.5 | 459.6 | 458.3 | 459.6 | 461.5 | 462.2  | 458.3 | 436.8 | 434.9 | 443.5 |
| 45°    | 441.5  | 442.2 | 438.1 | 436.1 | 438.1 | 442.2 | 441.5  | 438.8 | 416.8 | 411.4 | 417.5 |
| 47.5°  | 420.8  | 420.8 | 417.5 | 415.4 | 417.5 | 420.8 | 420.8  | 417.5 | 394.1 | 388.7 | 392.1 |
| 50°    | 398.8  | 398.1 | 393.4 | 392.7 | 393.4 | 398.1 | 398.8  | 396.8 | 372.1 | 367.4 | 367.4 |
| 52.5°  | 373.4  | 373.4 | 374.1 | 375.4 | 374.1 | 373.4 | 373.4  | 374.1 | 352.0 | 347.3 | 346.0 |
| 55°    | 351.4  | 352.0 | 356.7 | 358.1 | 356.7 | 352.0 | 351.4  | 351.4 | 331.3 | 326.6 | 324.0 |
| 57.5°  | 328.7  | 328.7 | 332.0 | 332.0 | 332.0 | 328.7 | 328.7  | 327.3 | 308.0 | 303.9 | 302.6 |
| 60°    | 302.6  | 303.9 | 306.6 | 306.0 | 306.6 | 303.9 | 302.6  | 301.3 | 284.6 | 281.9 | 277.2 |
| 62.5°  | 275.2  | 276.6 | 277.2 | 275.9 | 277.2 | 276.6 | 275.2  | 271.2 | 261.2 | 259.2 | 253.2 |
| 65°    | 246.5  | 247.8 | 248.5 | 247.1 | 248.5 | 247.8 | 246.5  | 244.5 | 237.1 | 233.8 | 228.5 |
| 67.5°  | 217.1  | 216.4 | 215.7 | 218.4 | 215.7 | 216.4 | 217.1  | 214.4 | 209.8 | 207.1 | 199.7 |
| 70°    | 187.0  | 187.0 | 186.4 | 187.7 | 186.4 | 187.0 | 187.0  | 185.1 | 182.4 | 180.4 | 173.7 |
| 72.5°  | 155.0  | 154.3 | 157.0 | 155.0 | 157.0 | 154.3 | 155.0  | 154.3 | 153.0 | 151.0 | 144.3 |
| 75°    | 123.6  | 124.9 | 123.6 | 125.6 | 123.6 | 124.9 | 123.6  | 124.2 | 123.6 | 122.2 | 117.5 |
| 77.5°  | 94.2   | 95.5  | 94.2  | 94.2  | 94.2  | 95.5  | 94.2   | 94.8  | 94.8  | 94.8  | 90.8  |
| 80°    | 66.8   | 66.1  | 66.1  | 65.4  | 66.1  | 66.1  | 66.8   | 66.8  | 67.4  | 66.1  | 64.8  |
| 82.5°  | 42.7   | 42.1  | 42.1  | 43.4  | 42.1  | 42.1  | 42.7   | 43.4  | 42.1  | 42.1  | 42.1  |
| 85°    | 23.4   | 24.0  | 22.7  | 22.7  | 22.7  | 24.0  | 23.4   | 22.0  | 23.4  | 23.4  | 22.7  |
| 87.5°  | 8.7    | 8.0   | 8.0   | 8.0   | 8.0   | 8.0   | 8.7    | 9.4   | 9.4   | 9.4   | 10.1  |
| 90°    | 3.8    | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8    | 5.1   | 6.8   | 7.6   | 6.5   |
| 92.5°  | 18.9   | 18.1  | 15.1  | 12.2  | 15.1  | 18.1  | 18.9   | 26.9  | 37.4  | 42.7  | 37.5  |
| 95°    | 64.3   | 62.1  | 53.0  | 43.8  | 53.0  | 62.1  | 64.3   | 84.5  | 111.4 | 124.8 | 105.4 |
| 97.5°  | 148.5  | 144.1 | 126.8 | 109.5 | 126.8 | 144.1 | 148.5  | 161.3 | 178.3 | 186.8 | 154.4 |
| 100°   | 208.6  | 203.4 | 182.8 | 162.0 | 182.8 | 203.4 | 208.6  | 207.7 | 206.4 | 205.8 | 169.9 |
| 102.5° | 259.9  | 255.4 | 237.6 | 219.9 | 237.6 | 255.4 | 259.9  | 243.6 | 222.0 | 211.2 | 174.8 |
| 105°   | 319.7  | 317.3 | 307.9 | 298.3 | 307.9 | 317.3 | 319.7  | 283.4 | 234.9 | 210.6 | 175.3 |
| 107.5° | 350.9  | 351.5 | 353.8 | 356.1 | 353.8 | 351.5 | 350.9  | 300.1 | 232.5 | 198.6 | 167.5 |
| 110°   | 358.9  | 361.3 | 371.2 | 381.2 | 371.2 | 361.3 | 358.9  | 302.1 | 226.5 | 188.6 | 160.7 |

TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 250°  | 260°  | 270°  | 280°  | 290°  | 292.5° | 300°  | 310°  | 315°  | 320°  |
|--------|--------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|
| 112.5° | 353.8  | 357.6 | 372.8 | 388.0 | 372.8 | 357.6 | 353.8  | 295.7 | 218.3 | 179.6 | 154.6 |
| 115°   | 336.4  | 341.7 | 362.9 | 384.1 | 362.9 | 341.7 | 336.4  | 280.6 | 206.0 | 168.7 | 147.7 |
| 117.5° | 312.6  | 318.5 | 341.9 | 365.4 | 341.9 | 318.5 | 312.6  | 262.1 | 194.9 | 161.3 | 143.3 |
| 120°   | 296.6  | 302.3 | 325.1 | 347.8 | 325.1 | 302.3 | 296.6  | 250.5 | 188.9 | 158.2 | 141.8 |
| 122.5° | 280.5  | 286.1 | 308.6 | 331.1 | 308.6 | 286.1 | 280.5  | 238.9 | 183.6 | 155.9 | 141.0 |
| 125°   | 259.3  | 264.4 | 285.2 | 305.9 | 285.2 | 264.4 | 259.3  | 224.0 | 176.9 | 153.4 | 140.4 |
| 127.5° | 242.2  | 246.6 | 264.0 | 281.5 | 264.0 | 246.6 | 242.2  | 211.9 | 171.5 | 151.3 | 140.0 |
| 130°   | 231.5  | 235.5 | 251.6 | 267.7 | 251.6 | 235.5 | 231.5  | 204.5 | 168.5 | 150.5 | 140.3 |
| 132.5° | 222.3  | 225.9 | 240.3 | 254.8 | 240.3 | 225.9 | 222.3  | 198.1 | 165.9 | 149.8 | 140.4 |
| 135°   | 209.3  | 212.3 | 224.9 | 237.3 | 224.9 | 212.3 | 209.3  | 189.0 | 162.0 | 148.6 | 140.3 |
| 137.5° | 199.7  | 202.3 | 212.4 | 222.7 | 212.4 | 202.3 | 199.7  | 182.6 | 159.8 | 148.4 | 141.1 |
| 140°   | 192.0  | 194.4 | 203.9 | 213.4 | 203.9 | 194.4 | 192.0  | 177.3 | 157.6 | 147.7 | 141.3 |
| 142.5° | 186.7  | 188.7 | 196.9 | 205.1 | 196.9 | 188.7 | 186.7  | 173.7 | 156.4 | 147.7 | 141.8 |
| 145°   | 178.6  | 180.2 | 186.4 | 192.5 | 186.4 | 180.2 | 178.6  | 167.9 | 153.8 | 146.7 | 141.8 |
| 147.5° | 171.8  | 173.1 | 178.2 | 183.4 | 178.2 | 173.1 | 171.8  | 163.4 | 152.3 | 146.7 | 142.8 |
| 150°   | 167.9  | 168.9 | 173.1 | 177.3 | 173.1 | 168.9 | 167.9  | 160.9 | 151.4 | 146.7 | 143.3 |
| 152.5° | 164.8  | 165.6 | 168.7 | 171.9 | 168.7 | 165.6 | 164.8  | 158.8 | 150.7 | 146.7 | 143.6 |
| 155°   | 161.2  | 161.7 | 163.7 | 165.8 | 163.7 | 161.7 | 161.2  | 156.4 | 149.9 | 146.7 | 144.3 |
| 157.5° | 157.9  | 158.3 | 159.8 | 161.3 | 159.8 | 158.3 | 157.9  | 154.2 | 149.2 | 146.7 | 145.1 |
| 160°   | 156.3  | 156.5 | 157.4 | 158.2 | 157.4 | 156.5 | 156.3  | 153.1 | 148.8 | 146.7 | 145.4 |
| 162.5° | 154.8  | 155.0 | 155.8 | 156.6 | 155.8 | 155.0 | 154.8  | 152.1 | 148.5 | 146.7 | 145.8 |
| 165°   | 152.5  | 152.7 | 153.6 | 154.4 | 153.6 | 152.7 | 152.5  | 150.6 | 148.0 | 146.7 | 146.3 |
| 167.5° | 151.5  | 151.6 | 151.9 | 152.3 | 151.9 | 151.6 | 151.5  | 150.2 | 148.5 | 147.7 | 147.3 |
| 170°   | 151.5  | 151.5 | 151.5 | 151.5 | 151.5 | 151.5 | 151.5  | 150.2 | 148.5 | 147.7 | 147.7 |
| 172.5° | 150.7  | 150.6 | 150.3 | 150.0 | 150.3 | 150.6 | 150.7  | 149.7 | 148.4 | 147.7 | 147.7 |
| 175°   | 149.6  | 149.6 | 149.6 | 149.6 | 149.6 | 149.6 | 149.6  | 149.0 | 148.1 | 147.7 | 147.9 |
| 177.5° | 149.4  | 149.3 | 149.0 | 148.6 | 149.0 | 149.3 | 149.4  | 148.9 | 148.2 | 147.9 | 148.1 |
| 180°   | 148.6  | 148.6 | 148.6 | 148.6 | 148.6 | 148.6 | 148.6  | 148.6 | 148.6 | 148.6 | 148.6 |

TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

|        | 330°  | 337.5° | 340°  | 350°  | 360°  |
|--------|-------|--------|-------|-------|-------|
| 0°     | 706.1 | 706.1  | 706.1 | 706.1 | 706.1 |
| 2.5°   | 697.4 | 700.7  | 702.7 | 705.4 | 712.0 |
| 5°     | 670.6 | 683.4  | 687.3 | 697.4 | 709.4 |
| 7.5°   | 611.8 | 650.6  | 661.2 | 685.3 | 704.1 |
| 10°    | 555.1 | 593.8  | 612.5 | 669.3 | 697.4 |
| 12.5°  | 526.4 | 549.1  | 561.7 | 641.2 | 688.0 |
| 15°    | 508.4 | 524.4  | 533.8 | 603.9 | 677.3 |
| 17.5°  | 494.3 | 505.7  | 512.3 | 567.1 | 662.6 |
| 20°    | 485.6 | 490.9  | 497.0 | 540.4 | 645.9 |
| 22.5°  | 479.6 | 476.3  | 481.0 | 521.7 | 623.2 |
| 25°    | 475.6 | 462.9  | 468.2 | 507.0 | 596.5 |
| 27.5°  | 479.0 | 450.9  | 452.9 | 493.6 | 568.4 |
| 30°    | 479.6 | 436.1  | 436.8 | 479.6 | 537.0 |
| 32.5°  | 474.9 | 420.8  | 421.5 | 462.2 | 501.7 |
| 35°    | 463.5 | 402.8  | 402.1 | 442.2 | 453.6 |
| 37.5°  | 448.2 | 383.5  | 383.5 | 420.1 | 400.8 |
| 40°    | 429.5 | 364.0  | 366.0 | 391.4 | 354.0 |
| 42.5°  | 406.8 | 343.3  | 346.0 | 353.4 | 319.3 |
| 45°    | 382.1 | 323.3  | 325.3 | 298.6 | 292.5 |
| 47.5°  | 354.7 | 302.6  | 303.3 | 247.8 | 283.9 |
| 50°    | 322.0 | 281.2  | 278.6 | 212.4 | 283.3 |
| 52.5°  | 293.2 | 257.9  | 249.8 | 192.3 | 257.2 |
| 55°    | 265.1 | 233.2  | 215.7 | 177.0 | 238.4 |
| 57.5°  | 240.4 | 201.1  | 184.4 | 159.0 | 234.5 |
| 60°    | 217.7 | 169.6  | 157.0 | 139.6 | 215.1 |
| 62.5°  | 199.1 | 146.3  | 143.6 | 126.3 | 195.0 |
| 65°    | 179.0 | 130.3  | 129.6 | 114.9 | 165.6 |
| 67.5°  | 159.7 | 119.5  | 118.9 | 104.2 | 126.3 |
| 70°    | 138.9 | 108.2  | 106.9 | 92.8  | 93.5  |
| 72.5°  | 117.5 | 95.5   | 94.2  | 83.5  | 77.5  |
| 75°    | 96.2  | 80.8   | 80.2  | 72.8  | 62.7  |
| 77.5°  | 75.5  | 64.1   | 65.4  | 58.8  | 46.1  |
| 80°    | 54.1  | 46.7   | 48.1  | 42.1  | 34.8  |
| 82.5°  | 36.1  | 30.8   | 32.1  | 26.7  | 23.4  |
| 85°    | 20.0  | 17.3   | 18.0  | 14.0  | 10.7  |
| 87.5°  | 9.4   | 8.0    | 8.0   | 5.4   | 3.4   |
| 90°    | 4.4   | 2.8    | 2.6   | 1.8   | 1.0   |
| 92.5°  | 27.1  | 19.2   | 17.5  | 10.8  | 4.0   |
| 95°    | 66.6  | 37.5   | 34.5  | 22.0  | 9.6   |
| 97.5°  | 89.7  | 41.2   | 38.4  | 27.5  | 16.5  |
| 100°   | 98.1  | 44.3   | 41.8  | 31.9  | 21.9  |
| 102.5° | 102.0 | 47.4   | 45.1  | 35.8  | 26.5  |
| 105°   | 104.9 | 52.0   | 50.0  | 42.2  | 34.4  |
| 107.5° | 105.4 | 58.8   | 57.0  | 49.6  | 42.3  |
| 110°   | 104.6 | 62.5   | 60.9  | 54.3  | 47.7  |



TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

|        | 330°  | 337.5° | 340°  | 350°  | 360°  |
|--------|-------|--------|-------|-------|-------|
| 112.5° | 104.6 | 67.1   | 65.5  | 59.3  | 53.0  |
| 115°   | 105.6 | 74.0   | 72.5  | 66.7  | 61.0  |
| 117.5° | 107.6 | 80.7   | 79.4  | 74.1  | 68.8  |
| 120°   | 109.1 | 84.6   | 83.4  | 78.4  | 73.4  |
| 122.5° | 111.4 | 89.1   | 87.8  | 82.9  | 77.9  |
| 125°   | 114.5 | 95.1   | 93.9  | 89.3  | 84.8  |
| 127.5° | 117.6 | 100.8  | 99.6  | 95.0  | 90.3  |
| 130°   | 119.9 | 104.6  | 103.3 | 98.3  | 93.3  |
| 132.5° | 121.7 | 107.7  | 106.5 | 101.5 | 96.5  |
| 135°   | 123.7 | 111.3  | 110.2 | 105.6 | 101.1 |
| 137.5° | 126.7 | 115.8  | 114.7 | 110.3 | 105.8 |
| 140°   | 128.5 | 118.9  | 117.9 | 113.7 | 109.7 |
| 142.5° | 130.1 | 121.2  | 120.2 | 116.4 | 112.6 |
| 145°   | 132.1 | 124.7  | 123.9 | 120.5 | 117.2 |
| 147.5° | 135.0 | 129.1  | 128.3 | 125.0 | 121.8 |
| 150°   | 136.5 | 131.4  | 130.7 | 127.7 | 124.8 |
| 152.5° | 137.4 | 132.9  | 132.3 | 130.1 | 127.9 |
| 155°   | 139.6 | 136.2  | 135.8 | 134.1 | 132.5 |
| 157.5° | 141.8 | 139.4  | 139.0 | 137.4 | 135.9 |
| 160°   | 142.8 | 140.9  | 140.6 | 139.3 | 138.1 |
| 162.5° | 143.9 | 142.5  | 142.3 | 141.3 | 140.4 |
| 165°   | 145.4 | 144.8  | 144.6 | 143.7 | 142.9 |
| 167.5° | 146.6 | 146.1  | 146.0 | 145.6 | 145.2 |
| 170°   | 147.6 | 147.6  | 147.5 | 147.1 | 146.7 |
| 172.5° | 147.7 | 147.7  | 147.7 | 147.6 | 147.5 |
| 175°   | 148.3 | 148.6  | 148.6 | 148.6 | 148.6 |
| 177.5° | 148.4 | 148.6  | 148.6 | 148.6 | 148.6 |
| 180°   | 148.6 | 148.6  | 148.6 | 148.6 | 148.6 |

TEST NUMBER: P933882

CATALOG NUMBER: SQ4-FA-025U-050D-B2750-1D-UNV-W2A-W-4-2700K

**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 | 12.65            | 13.67 | 13.46 | 14.50 | 15.53 | 15.44          | 16.46 | 16.26 | 17.30 | 18.33 |
|                 | 3H   | 13.13            | 14.05 | 13.96 | 14.89 | 15.95 | 16.79          | 17.71 | 17.62 | 18.55 | 19.61 |
|                 | 4H   | 13.33            | 14.20 | 14.17 | 15.05 | 16.12 | 17.24          | 18.10 | 18.08 | 18.95 | 20.02 |
|                 | 6H   | 13.46            | 14.26 | 14.31 | 15.12 | 16.20 | 17.52          | 18.32 | 18.38 | 19.18 | 20.26 |
|                 | 8H   | 13.47            | 14.23 | 14.33 | 15.10 | 16.19 | 17.60          | 18.36 | 18.46 | 19.23 | 20.32 |
|                 | 12H  | 13.44            | 14.17 | 14.31 | 15.04 | 16.15 | 17.64          | 18.36 | 18.50 | 19.23 | 20.34 |
| 4H              | 2H   | 13.69            | 14.55 | 14.54 | 15.41 | 16.48 | 15.87          | 16.74 | 16.72 | 17.59 | 18.66 |
|                 | 3H   | 14.73            | 15.45 | 15.59 | 16.34 | 17.42 | 17.38          | 18.11 | 18.24 | 18.99 | 20.07 |
|                 | 4H   | 15.01            | 15.67 | 15.88 | 16.55 | 17.66 | 17.91          | 18.57 | 18.78 | 19.45 | 20.56 |
|                 | 6H   | 15.15            | 15.72 | 16.03 | 16.62 | 17.74 | 18.28          | 18.85 | 19.17 | 19.75 | 20.87 |
|                 | 8H   | 15.16            | 15.69 | 16.05 | 16.59 | 17.72 | 18.38          | 18.91 | 19.27 | 19.81 | 20.94 |
|                 | 12H  | 15.13            | 15.61 | 16.04 | 16.53 | 17.66 | 18.44          | 18.92 | 19.35 | 19.84 | 20.97 |
| 8H              | 4H   | 15.48            | 16.00 | 16.36 | 16.90 | 18.03 | 18.05          | 18.58 | 18.94 | 19.48 | 20.61 |
|                 | 6H   | 15.74            | 16.18 | 16.66 | 17.12 | 18.25 | 18.49          | 18.92 | 19.40 | 19.87 | 20.99 |
|                 | 8H   | 15.79            | 16.18 | 16.71 | 17.11 | 18.26 | 18.63          | 19.02 | 19.56 | 19.96 | 21.10 |
|                 | 12H  | 15.78            | 16.12 | 16.71 | 17.05 | 18.24 | 18.73          | 19.08 | 19.66 | 20.00 | 21.20 |
| 12H             | 4H   | 15.49            | 15.97 | 16.40 | 16.88 | 18.02 | 18.02          | 18.50 | 18.93 | 19.42 | 20.55 |
|                 | 6H   | 15.80            | 16.19 | 16.73 | 17.13 | 18.27 | 18.48          | 18.87 | 19.41 | 19.81 | 20.95 |
|                 | 8H   | 15.88            | 16.22 | 16.81 | 17.15 | 18.34 | 18.65          | 18.99 | 19.58 | 19.92 | 21.11 |