

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: CORELITE

Report Number: P303130

Luminaire Tested: **CTW-F-5050-20L940-UNV-STD-8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P303130  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-181-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: CTW-F-5050-20L940-UNV-STD-8  
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE  
50% UPLIGHT, 50% DOWNLIGHT, 2000 LUMEN PACKAGE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

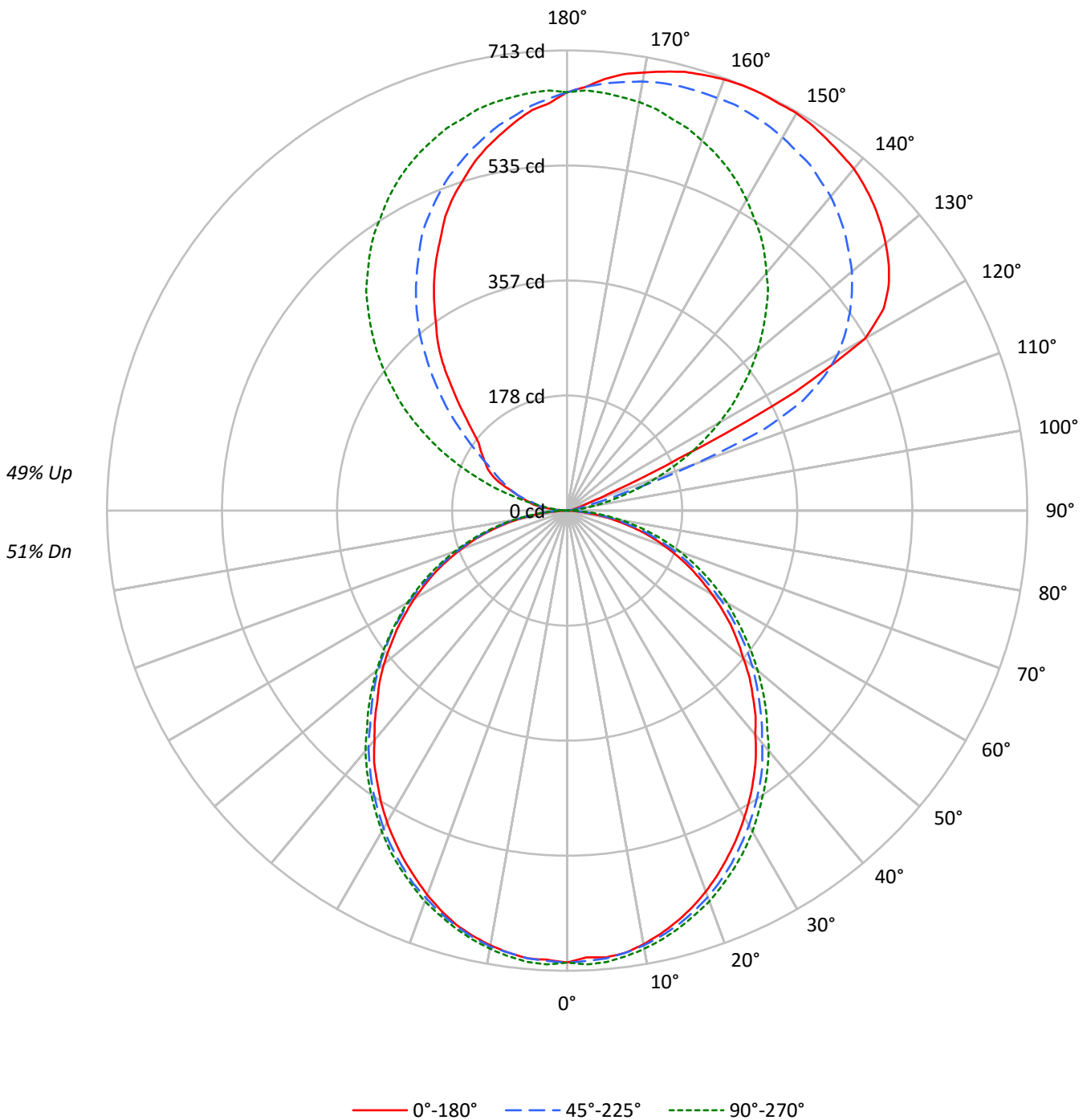
Lumens per Lamp: N/A  
Luminaire Lumens: 3686.0 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 8' x L: 0.12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 31.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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CATALOG NUMBER: CTW-F-5050-20L940-UNV-STD-8

### Luminous Intensity Polar Plot





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

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     |    | 20 |    |    |    |    | 20 |    |    |    |    | 20 |    |    |    |    | 20 |    |
| RC  | 80  |     |     |     |    | 70 |    |    |    |    | 50 |    |    |    |    | 30 |    |    |    |    | 10 | 0  |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0  |    |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 84 | 84 | 84 | 70 | 70 | 70 | 57 | 57 | 57 | 51 |    |    |    | 51 |
| 1   | 98  | 93  | 89  | 86  | 90 | 86 | 83 | 80 | 73 | 71 | 68 | 61 | 59 | 58 | 50 | 49 | 48 | 42 |    |    |    | 42 |
| 2   | 89  | 81  | 75  | 70  | 82 | 75 | 70 | 65 | 64 | 60 | 57 | 54 | 51 | 48 | 44 | 42 | 40 | 35 |    |    |    | 35 |
| 3   | 81  | 72  | 64  | 58  | 75 | 66 | 60 | 55 | 56 | 51 | 47 | 47 | 44 | 41 | 39 | 36 | 34 | 30 |    |    |    | 30 |
| 4   | 74  | 63  | 55  | 49  | 68 | 59 | 52 | 46 | 50 | 45 | 40 | 42 | 38 | 35 | 35 | 32 | 29 | 26 |    |    |    | 26 |
| 5   | 68  | 56  | 48  | 42  | 63 | 52 | 45 | 40 | 45 | 39 | 35 | 38 | 33 | 30 | 31 | 28 | 25 | 22 |    |    |    | 22 |
| 6   | 63  | 50  | 42  | 36  | 58 | 47 | 40 | 34 | 40 | 35 | 30 | 34 | 30 | 26 | 28 | 25 | 22 | 19 |    |    |    | 19 |
| 7   | 58  | 46  | 38  | 32  | 53 | 42 | 35 | 30 | 37 | 31 | 27 | 31 | 27 | 23 | 26 | 22 | 20 | 17 |    |    |    | 17 |
| 8   | 54  | 41  | 34  | 28  | 50 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 24 | 20 | 18 | 15 |    |    |    | 15 |
| 9   | 50  | 38  | 30  | 25  | 46 | 35 | 28 | 24 | 31 | 25 | 21 | 26 | 22 | 19 | 22 | 18 | 16 | 14 |    |    |    | 14 |
| 10  | 47  | 35  | 27  | 23  | 43 | 32 | 26 | 21 | 28 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 15 | 13 |    |    |    | 13 |

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

|     | 0°   | 90°  | 180° |
|-----|------|------|------|
| 0°  | 7537 | 7537 | 7537 |
| 5°  | 7507 | 7585 | 7527 |
| 10° | 7456 | 7535 | 7476 |
| 15° | 7341 | 7462 | 7402 |
| 20° | 7196 | 7381 | 7258 |
| 25° | 7012 | 7269 | 7097 |
| 30° | 6824 | 7137 | 6935 |
| 35° | 6623 | 6978 | 6741 |
| 40° | 6374 | 6829 | 6525 |
| 45° | 6193 | 6631 | 6330 |
| 50° | 5968 | 6450 | 6209 |
| 55° | 5810 | 6283 | 6047 |
| 60° | 5580 | 6161 | 5890 |
| 65° | 5364 | 6006 | 5731 |
| 70° | 5042 | 5835 | 5495 |
| 75° | 4641 | 5614 | 5240 |
| 80° | 3905 | 5244 | 4686 |
| 85° | 2223 | 4668 | 3557 |



TEST NUMBER: P303130

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 66.1   | 1.8       |
| 10°-20°   | 187.1  | 5.1       |
| 20°-30°   | 277.2  | 7.5       |
| 30°-40°   | 325.0  | 8.8       |
| 40°-50°   | 327.0  | 8.9       |
| 50°-60°   | 291.6  | 7.9       |
| 60°-70°   | 223.7  | 6.1       |
| 70°-80°   | 133.1  | 3.6       |
| 80°-90°   | 36.0   | 1.0       |
| 90°-100°  | 17.1   | 0.5       |
| 100°-110° | 76.5   | 2.1       |
| 110°-120° | 218.0  | 5.9       |
| 120°-130° | 321.1  | 8.7       |
| 130°-140° | 346.3  | 9.4       |
| 140°-150° | 329.8  | 8.9       |
| 150°-160° | 271.3  | 7.4       |
| 160°-170° | 177.5  | 4.8       |
| 170°-180° | 61.5   | 1.7       |
| 0°-30°    | 530.4  | 14.4      |
| 0°-40°    | 855.4  | 23.2      |
| 0°-60°    | 1474.0 | 40.0      |
| 0°-90°    | 1866.8 | 50.6      |
| 90°-120°  | 311.6  | 8.5       |
| 90°-150°  | 1308.8 | 35.5      |
| 90°-180°  | 1819.0 | 49.3      |
| 0°-180°   | 3686.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 45° | 90° | 135° | 180° | Flux |
|------|-----|-----|-----|------|------|------|
| 0°   | 700 | 700 | 700 | 700  | 700  |      |
| 5°   | 695 | 697 | 702 | 697  | 697  | 66   |
| 15°  | 659 | 664 | 670 | 666  | 664  | 186  |
| 25°  | 590 | 603 | 612 | 607  | 598  | 272  |
| 35°  | 504 | 520 | 531 | 526  | 513  | 315  |
| 45°  | 407 | 421 | 436 | 428  | 416  | 314  |
| 55°  | 310 | 324 | 335 | 333  | 322  | 276  |
| 65°  | 211 | 221 | 236 | 230  | 225  | 208  |
| 75°  | 112 | 121 | 135 | 130  | 126  | 118  |
| 85°  | 18  | 25  | 38  | 34   | 29   | 24   |
| 90°  | 2   | 2   | 0   | 2    | 4    | 1    |
| 95°  | 4   | 4   | 13  | 23   | 22   | 4    |
| 105° | 18  | 45  | 86  | 65   | 70   | 21   |
| 115° | 191 | 403 | 211 | 115  | 128  | 233  |
| 125° | 608 | 535 | 329 | 185  | 164  | 539  |
| 135° | 671 | 608 | 436 | 295  | 239  | 518  |
| 145° | 702 | 655 | 522 | 409  | 355  | 441  |
| 155° | 713 | 677 | 587 | 506  | 464  | 329  |
| 165° | 704 | 680 | 628 | 578  | 558  | 199  |
| 175° | 671 | 664 | 650 | 630  | 623  | 65   |
| 180° | 648 | 648 | 648 | 648  | 648  |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 22.5° | 25°   | 30°   | 35°   | 40°   | 45°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 |
| 2.5°   | 693.0 | 693.0 | 694.8 | 696.6 | 698.4 | 698.4 | 700.2 | 700.2 | 700.2 | 700.2 | 698.4 |
| 5°     | 694.8 | 693.0 | 694.8 | 694.8 | 694.8 | 694.8 | 696.6 | 698.4 | 698.4 | 698.4 | 696.6 |
| 7.5°   | 691.2 | 689.4 | 691.2 | 691.2 | 689.4 | 689.4 | 691.2 | 693.0 | 693.0 | 693.0 | 691.2 |
| 10°    | 682.2 | 680.4 | 682.2 | 682.2 | 682.2 | 682.2 | 684.0 | 684.0 | 685.8 | 685.8 | 684.0 |
| 12.5°  | 671.4 | 671.4 | 671.4 | 673.2 | 671.4 | 673.2 | 673.2 | 675.0 | 676.8 | 676.8 | 675.0 |
| 15°    | 658.8 | 658.8 | 660.6 | 662.4 | 660.6 | 662.4 | 662.4 | 664.2 | 664.2 | 666.0 | 664.2 |
| 17.5°  | 644.4 | 644.4 | 646.2 | 648.0 | 648.0 | 648.0 | 649.8 | 649.8 | 651.6 | 651.6 | 651.6 |
| 20°    | 628.2 | 628.2 | 628.2 | 631.8 | 631.8 | 631.8 | 631.8 | 633.6 | 637.2 | 637.2 | 637.2 |
| 22.5°  | 610.2 | 610.2 | 610.2 | 613.8 | 613.8 | 613.8 | 613.8 | 615.6 | 619.2 | 621.0 | 621.0 |
| 25°    | 590.4 | 590.4 | 590.4 | 594.0 | 594.0 | 594.0 | 594.0 | 597.6 | 601.2 | 601.2 | 603.0 |
| 27.5°  | 570.6 | 570.6 | 572.4 | 574.2 | 574.2 | 574.2 | 576.0 | 577.8 | 581.4 | 583.2 | 583.2 |
| 30°    | 549.0 | 549.0 | 549.0 | 552.6 | 552.6 | 554.4 | 554.4 | 558.0 | 559.8 | 563.4 | 563.4 |
| 32.5°  | 527.4 | 527.4 | 529.2 | 531.0 | 531.0 | 531.0 | 532.8 | 536.4 | 538.2 | 540.0 | 541.8 |
| 35°    | 504.0 | 504.0 | 505.8 | 507.6 | 509.4 | 509.4 | 509.4 | 513.0 | 514.8 | 518.4 | 520.2 |
| 37.5°  | 480.6 | 480.6 | 482.4 | 484.2 | 486.0 | 486.0 | 486.0 | 489.6 | 491.4 | 495.0 | 496.8 |
| 40°    | 453.6 | 453.6 | 453.6 | 457.2 | 457.2 | 459.0 | 459.0 | 460.8 | 464.4 | 468.0 | 469.8 |
| 42.5°  | 432.0 | 430.2 | 430.2 | 432.0 | 433.8 | 435.6 | 435.6 | 437.4 | 441.0 | 444.6 | 446.4 |
| 45°    | 406.8 | 406.8 | 406.8 | 408.6 | 410.4 | 410.4 | 412.2 | 414.0 | 415.8 | 421.2 | 421.2 |
| 47.5°  | 383.4 | 381.6 | 381.6 | 385.2 | 385.2 | 387.0 | 387.0 | 388.8 | 392.4 | 396.0 | 397.8 |
| 50°    | 356.4 | 358.2 | 358.2 | 360.0 | 361.8 | 361.8 | 363.6 | 363.6 | 367.2 | 370.8 | 374.4 |
| 52.5°  | 333.0 | 333.0 | 333.0 | 334.8 | 336.6 | 338.4 | 338.4 | 340.2 | 342.0 | 345.6 | 349.2 |
| 55°    | 309.6 | 309.6 | 309.6 | 311.4 | 311.4 | 313.2 | 313.2 | 315.0 | 316.8 | 320.4 | 324.0 |
| 57.5°  | 284.4 | 284.4 | 284.4 | 286.2 | 288.0 | 288.0 | 289.8 | 289.8 | 291.6 | 295.2 | 298.8 |
| 60°    | 259.2 | 259.2 | 259.2 | 261.0 | 262.8 | 262.8 | 264.6 | 264.6 | 266.4 | 270.0 | 273.6 |
| 62.5°  | 234.0 | 235.8 | 234.0 | 235.8 | 237.6 | 237.6 | 239.4 | 239.4 | 243.0 | 243.0 | 246.6 |
| 65°    | 210.6 | 210.6 | 210.6 | 210.6 | 212.4 | 212.4 | 212.4 | 216.0 | 216.0 | 219.6 | 221.4 |
| 67.5°  | 185.4 | 185.4 | 185.4 | 185.4 | 187.2 | 189.0 | 189.0 | 190.8 | 192.6 | 192.6 | 196.2 |
| 70°    | 160.2 | 162.0 | 162.0 | 160.2 | 162.0 | 163.8 | 163.8 | 165.6 | 167.4 | 167.4 | 171.0 |
| 72.5°  | 136.8 | 136.8 | 136.8 | 136.8 | 136.8 | 138.6 | 140.4 | 140.4 | 142.2 | 144.0 | 145.8 |
| 75°    | 111.6 | 111.6 | 113.4 | 111.6 | 111.6 | 113.4 | 115.2 | 117.0 | 117.0 | 118.8 | 120.6 |
| 77.5°  | 86.4  | 88.2  | 88.2  | 88.2  | 90.0  | 90.0  | 90.0  | 91.8  | 93.6  | 93.6  | 95.4  |
| 80°    | 63.0  | 64.8  | 64.8  | 64.8  | 66.6  | 64.8  | 66.6  | 68.4  | 68.4  | 70.2  | 72.0  |
| 82.5°  | 39.6  | 39.6  | 41.4  | 41.4  | 41.4  | 41.4  | 43.2  | 45.0  | 45.0  | 45.0  | 48.6  |
| 85°    | 18.0  | 18.0  | 19.8  | 19.8  | 19.8  | 19.8  | 21.6  | 21.6  | 23.4  | 23.4  | 25.2  |
| 87.5°  | 1.8   | 1.8   | 1.8   | 1.8   | 3.6   | 1.8   | 3.6   | 3.6   | 3.6   | 3.6   | 5.4   |
| 90°    | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   |
| 92.5°  | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   |
| 95°    | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   |
| 97.5°  | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 7.2   | 7.2   | 7.2   | 7.2   | 9.0   |
| 100°   | 9.0   | 9.0   | 9.0   | 9.0   | 9.0   | 9.0   | 9.0   | 10.8  | 10.8  | 12.6  | 14.4  |
| 102.5° | 12.6  | 12.6  | 12.6  | 12.6  | 14.4  | 14.4  | 14.4  | 16.2  | 16.2  | 19.8  | 23.4  |
| 105°   | 18.0  | 18.0  | 18.0  | 19.8  | 19.8  | 19.8  | 21.6  | 23.4  | 27.0  | 34.2  | 45.0  |
| 107.5° | 25.2  | 27.0  | 27.0  | 27.0  | 30.6  | 30.6  | 34.2  | 39.6  | 48.6  | 70.2  | 99.0  |
| 110°   | 39.6  | 41.4  | 41.4  | 45.0  | 52.2  | 55.8  | 63.0  | 82.8  | 111.6 | 156.6 | 210.6 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 22.5° | 25°   | 30°   | 35°   | 40°   | 45°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 77.4  | 81.0  | 84.6  | 95.4  | 115.2 | 129.6 | 149.4 | 196.2 | 248.4 | 307.8 | 331.2 |
| 115°   | 190.8 | 192.6 | 208.8 | 230.4 | 275.4 | 300.6 | 324.0 | 365.4 | 397.8 | 405.0 | 403.2 |
| 117.5° | 397.8 | 406.8 | 415.8 | 430.2 | 450.0 | 459.0 | 469.8 | 478.8 | 471.6 | 462.6 | 448.2 |
| 120°   | 532.8 | 529.2 | 532.8 | 534.6 | 532.8 | 532.8 | 531.0 | 523.8 | 511.2 | 498.6 | 484.2 |
| 122.5° | 581.4 | 579.6 | 577.8 | 576.0 | 568.8 | 567.0 | 563.4 | 552.6 | 540.0 | 525.6 | 511.2 |
| 125°   | 608.4 | 606.6 | 603.0 | 599.4 | 594.0 | 590.4 | 586.8 | 576.0 | 563.4 | 549.0 | 534.6 |
| 127.5° | 628.2 | 626.4 | 622.8 | 619.2 | 613.8 | 610.2 | 604.8 | 595.8 | 583.2 | 570.6 | 556.2 |
| 130°   | 644.4 | 642.6 | 639.0 | 637.2 | 630.0 | 628.2 | 622.8 | 612.0 | 601.2 | 590.4 | 576.0 |
| 132.5° | 658.8 | 657.0 | 653.4 | 651.6 | 646.2 | 642.6 | 639.0 | 628.2 | 615.6 | 604.8 | 592.2 |
| 135°   | 671.4 | 669.6 | 667.8 | 666.0 | 660.6 | 657.0 | 651.6 | 642.6 | 631.8 | 621.0 | 608.4 |
| 137.5° | 682.2 | 680.4 | 678.6 | 675.0 | 671.4 | 667.8 | 662.4 | 653.4 | 646.2 | 635.4 | 622.8 |
| 140°   | 691.2 | 689.4 | 685.8 | 684.0 | 680.4 | 676.8 | 673.2 | 666.0 | 657.0 | 648.0 | 635.4 |
| 142.5° | 696.6 | 696.6 | 693.0 | 693.0 | 687.6 | 684.0 | 680.4 | 673.2 | 667.8 | 658.8 | 644.4 |
| 145°   | 702.0 | 702.0 | 700.2 | 698.4 | 694.8 | 691.2 | 687.6 | 682.2 | 675.0 | 667.8 | 655.2 |
| 147.5° | 707.4 | 705.6 | 705.6 | 703.8 | 700.2 | 696.6 | 694.8 | 689.4 | 682.2 | 675.0 | 660.6 |
| 150°   | 711.0 | 709.2 | 709.2 | 707.4 | 703.8 | 700.2 | 698.4 | 694.8 | 687.6 | 680.4 | 667.8 |
| 152.5° | 711.0 | 711.0 | 712.8 | 709.2 | 705.6 | 703.8 | 702.0 | 696.6 | 693.0 | 684.0 | 673.2 |
| 155°   | 712.8 | 712.8 | 712.8 | 711.0 | 705.6 | 703.8 | 702.0 | 698.4 | 694.8 | 687.6 | 676.8 |
| 157.5° | 712.8 | 712.8 | 712.8 | 711.0 | 705.6 | 703.8 | 702.0 | 700.2 | 696.6 | 689.4 | 680.4 |
| 160°   | 711.0 | 711.0 | 711.0 | 711.0 | 707.4 | 703.8 | 702.0 | 700.2 | 696.6 | 689.4 | 680.4 |
| 162.5° | 707.4 | 707.4 | 707.4 | 707.4 | 703.8 | 702.0 | 700.2 | 698.4 | 696.6 | 687.6 | 680.4 |
| 165°   | 703.8 | 703.8 | 703.8 | 702.0 | 698.4 | 698.4 | 696.6 | 694.8 | 693.0 | 685.8 | 680.4 |
| 167.5° | 696.6 | 696.6 | 696.6 | 694.8 | 691.2 | 691.2 | 691.2 | 689.4 | 687.6 | 682.2 | 678.6 |
| 170°   | 689.4 | 689.4 | 689.4 | 687.6 | 685.8 | 685.8 | 685.8 | 684.0 | 684.0 | 678.6 | 675.0 |
| 172.5° | 682.2 | 682.2 | 682.2 | 680.4 | 676.8 | 676.8 | 676.8 | 678.6 | 676.8 | 673.2 | 669.6 |
| 175°   | 671.4 | 669.6 | 669.6 | 669.6 | 669.6 | 667.8 | 669.6 | 669.6 | 669.6 | 666.0 | 664.2 |
| 177.5° | 657.0 | 657.0 | 657.0 | 658.8 | 658.8 | 658.8 | 658.8 | 660.6 | 660.6 | 658.8 | 657.0 |
| 180°   | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 |



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**CANDELA DISTRIBUTION (continued):**

|        | 50°   | 55°   | 60°   | 65°   | 67.5° | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 |
| 2.5°   | 696.6 | 698.4 | 696.6 | 696.6 | 696.6 | 696.6 | 696.6 | 698.4 | 702.0 | 703.8 | 702.0 |
| 5°     | 694.8 | 696.6 | 694.8 | 694.8 | 694.8 | 694.8 | 694.8 | 696.6 | 700.2 | 702.0 | 700.2 |
| 7.5°   | 689.4 | 691.2 | 689.4 | 689.4 | 689.4 | 689.4 | 689.4 | 691.2 | 696.6 | 696.6 | 696.6 |
| 10°    | 682.2 | 684.0 | 682.2 | 682.2 | 682.2 | 684.0 | 684.0 | 685.8 | 689.4 | 689.4 | 689.4 |
| 12.5°  | 673.2 | 675.0 | 673.2 | 673.2 | 675.0 | 675.0 | 673.2 | 676.8 | 680.4 | 680.4 | 680.4 |
| 15°    | 662.4 | 664.2 | 662.4 | 662.4 | 662.4 | 664.2 | 664.2 | 666.0 | 669.6 | 669.6 | 669.6 |
| 17.5°  | 648.0 | 649.8 | 649.8 | 649.8 | 651.6 | 651.6 | 651.6 | 653.4 | 657.0 | 657.0 | 657.0 |
| 20°    | 635.4 | 635.4 | 635.4 | 635.4 | 635.4 | 637.2 | 637.2 | 640.8 | 644.4 | 644.4 | 644.4 |
| 22.5°  | 619.2 | 619.2 | 621.0 | 619.2 | 621.0 | 622.8 | 621.0 | 624.6 | 628.2 | 628.2 | 628.2 |
| 25°    | 601.2 | 603.0 | 603.0 | 603.0 | 603.0 | 604.8 | 604.8 | 608.4 | 610.2 | 612.0 | 612.0 |
| 27.5°  | 583.2 | 583.2 | 585.0 | 585.0 | 585.0 | 586.8 | 586.8 | 590.4 | 594.0 | 594.0 | 594.0 |
| 30°    | 563.4 | 563.4 | 565.2 | 567.0 | 565.2 | 567.0 | 567.0 | 570.6 | 572.4 | 574.2 | 574.2 |
| 32.5°  | 541.8 | 541.8 | 545.4 | 545.4 | 545.4 | 547.2 | 547.2 | 549.0 | 552.6 | 552.6 | 554.4 |
| 35°    | 520.2 | 520.2 | 523.8 | 523.8 | 523.8 | 525.6 | 525.6 | 527.4 | 531.0 | 531.0 | 532.8 |
| 37.5°  | 496.8 | 498.6 | 500.4 | 502.2 | 500.4 | 502.2 | 502.2 | 505.8 | 507.6 | 509.4 | 509.4 |
| 40°    | 473.4 | 473.4 | 475.2 | 477.0 | 477.0 | 478.8 | 480.6 | 482.4 | 486.0 | 486.0 | 486.0 |
| 42.5°  | 446.4 | 448.2 | 450.0 | 451.8 | 451.8 | 453.6 | 455.4 | 455.4 | 457.2 | 459.0 | 459.0 |
| 45°    | 423.0 | 424.8 | 424.8 | 428.4 | 430.2 | 430.2 | 430.2 | 432.0 | 433.8 | 435.6 | 435.6 |
| 47.5°  | 399.6 | 401.4 | 403.2 | 406.8 | 405.0 | 405.0 | 406.8 | 406.8 | 408.6 | 410.4 | 412.2 |
| 50°    | 374.4 | 376.2 | 378.0 | 379.8 | 379.8 | 381.6 | 381.6 | 383.4 | 385.2 | 385.2 | 387.0 |
| 52.5°  | 349.2 | 351.0 | 354.6 | 354.6 | 356.4 | 356.4 | 358.2 | 358.2 | 360.0 | 360.0 | 361.8 |
| 55°    | 324.0 | 325.8 | 329.4 | 331.2 | 331.2 | 333.0 | 333.0 | 334.8 | 334.8 | 334.8 | 336.6 |
| 57.5°  | 298.8 | 300.6 | 304.2 | 306.0 | 306.0 | 307.8 | 307.8 | 309.6 | 309.6 | 309.6 | 311.4 |
| 60°    | 273.6 | 275.4 | 279.0 | 280.8 | 280.8 | 282.6 | 282.6 | 284.4 | 284.4 | 286.2 | 286.2 |
| 62.5°  | 250.2 | 250.2 | 253.8 | 255.6 | 255.6 | 255.6 | 257.4 | 259.2 | 259.2 | 261.0 | 262.8 |
| 65°    | 223.2 | 225.0 | 228.6 | 230.4 | 228.6 | 230.4 | 232.2 | 234.0 | 234.0 | 235.8 | 235.8 |
| 67.5°  | 198.0 | 199.8 | 203.4 | 203.4 | 203.4 | 205.2 | 207.0 | 208.8 | 208.8 | 210.6 | 210.6 |
| 70°    | 172.8 | 172.8 | 176.4 | 178.2 | 178.2 | 180.0 | 181.8 | 183.6 | 183.6 | 185.4 | 185.4 |
| 72.5°  | 145.8 | 147.6 | 151.2 | 153.0 | 154.8 | 154.8 | 156.6 | 156.6 | 160.2 | 160.2 | 160.2 |
| 75°    | 122.4 | 122.4 | 126.0 | 127.8 | 129.6 | 129.6 | 131.4 | 131.4 | 133.2 | 135.0 | 135.0 |
| 77.5°  | 97.2  | 99.0  | 100.8 | 102.6 | 104.4 | 104.4 | 106.2 | 106.2 | 108.0 | 109.8 | 109.8 |
| 80°    | 73.8  | 73.8  | 77.4  | 77.4  | 79.2  | 79.2  | 81.0  | 82.8  | 84.6  | 84.6  | 84.6  |
| 82.5°  | 48.6  | 50.4  | 54.0  | 54.0  | 55.8  | 55.8  | 57.6  | 57.6  | 59.4  | 59.4  | 61.2  |
| 85°    | 27.0  | 28.8  | 30.6  | 30.6  | 32.4  | 32.4  | 34.2  | 36.0  | 36.0  | 37.8  | 37.8  |
| 87.5°  | 5.4   | 9.0   | 9.0   | 10.8  | 10.8  | 12.6  | 12.6  | 14.4  | 16.2  | 16.2  | 16.2  |
| 90°    | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 0.0   | 1.8   | 0.0   | 1.8   |
| 92.5°  | 1.8   | 1.8   | 1.8   | 3.6   | 3.6   | 3.6   | 5.4   | 5.4   | 5.4   | 5.4   | 7.2   |
| 95°    | 5.4   | 5.4   | 7.2   | 9.0   | 10.8  | 12.6  | 16.2  | 18.0  | 16.2  | 12.6  | 12.6  |
| 97.5°  | 9.0   | 12.6  | 16.2  | 23.4  | 27.0  | 30.6  | 36.0  | 34.2  | 30.6  | 25.2  | 23.4  |
| 100°   | 18.0  | 25.2  | 34.2  | 48.6  | 55.8  | 61.2  | 63.0  | 59.4  | 50.4  | 41.4  | 37.8  |
| 102.5° | 32.4  | 48.6  | 70.2  | 93.6  | 99.0  | 100.8 | 97.2  | 88.2  | 75.6  | 63.0  | 54.0  |
| 105°   | 66.6  | 100.8 | 131.4 | 149.4 | 151.2 | 147.6 | 138.6 | 120.6 | 104.4 | 86.4  | 75.6  |
| 107.5° | 144.0 | 189.0 | 207.0 | 208.8 | 203.4 | 194.4 | 176.4 | 156.6 | 136.8 | 117.0 | 100.8 |
| 110°   | 255.6 | 275.4 | 271.8 | 255.6 | 246.6 | 237.6 | 214.2 | 192.6 | 169.2 | 145.8 | 129.6 |





TEST NUMBER: P303130

CATALOG NUMBER: CTW-F-5050-20L940-UNV-STD-8

**CANDELA DISTRIBUTION (continued):**

|        | 50°   | 55°   | 60°   | 65°   | 67.5° | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 340.2 | 334.8 | 318.6 | 297.0 | 286.2 | 275.4 | 252.0 | 228.6 | 199.8 | 178.2 | 160.2 |
| 115°   | 394.2 | 378.0 | 356.4 | 333.0 | 322.2 | 311.4 | 288.0 | 261.0 | 234.0 | 210.6 | 190.8 |
| 117.5° | 432.0 | 412.2 | 390.6 | 367.2 | 354.6 | 343.8 | 318.6 | 291.6 | 266.4 | 241.2 | 223.2 |
| 120°   | 462.6 | 441.0 | 419.4 | 396.0 | 387.0 | 374.4 | 349.2 | 322.2 | 295.2 | 271.8 | 253.8 |
| 122.5° | 491.4 | 469.8 | 446.4 | 426.6 | 414.0 | 403.2 | 376.2 | 351.0 | 325.8 | 302.4 | 284.4 |
| 125°   | 518.4 | 496.8 | 473.4 | 451.8 | 441.0 | 428.4 | 401.4 | 378.0 | 352.8 | 329.4 | 313.2 |
| 127.5° | 538.2 | 520.2 | 500.4 | 478.8 | 466.2 | 453.6 | 426.6 | 403.2 | 379.8 | 358.2 | 340.2 |
| 130°   | 558.0 | 540.0 | 522.0 | 502.2 | 491.4 | 475.2 | 451.8 | 426.6 | 405.0 | 385.2 | 369.0 |
| 132.5° | 574.2 | 559.8 | 540.0 | 522.0 | 509.4 | 496.8 | 473.4 | 450.0 | 430.2 | 410.4 | 394.2 |
| 135°   | 592.2 | 576.0 | 558.0 | 540.0 | 529.2 | 518.4 | 496.8 | 473.4 | 455.4 | 435.6 | 419.4 |
| 137.5° | 606.6 | 590.4 | 574.2 | 556.2 | 545.4 | 534.6 | 516.6 | 495.0 | 477.0 | 460.8 | 442.8 |
| 140°   | 619.2 | 603.0 | 588.6 | 570.6 | 559.8 | 550.8 | 532.8 | 514.8 | 500.4 | 480.6 | 466.2 |
| 142.5° | 630.0 | 613.8 | 601.2 | 583.2 | 572.4 | 565.2 | 549.0 | 531.0 | 518.4 | 502.2 | 489.6 |
| 145°   | 639.0 | 624.6 | 612.0 | 595.8 | 586.8 | 579.6 | 563.4 | 549.0 | 536.4 | 522.0 | 509.4 |
| 147.5° | 649.8 | 633.6 | 622.8 | 606.6 | 599.4 | 592.2 | 577.8 | 563.4 | 552.6 | 538.2 | 527.4 |
| 150°   | 657.0 | 644.4 | 633.6 | 617.4 | 610.2 | 603.0 | 590.4 | 579.6 | 568.8 | 556.2 | 545.4 |
| 152.5° | 662.4 | 651.6 | 640.8 | 626.4 | 621.0 | 615.6 | 603.0 | 592.2 | 583.2 | 572.4 | 561.6 |
| 155°   | 667.8 | 657.0 | 649.8 | 635.4 | 630.0 | 624.6 | 613.8 | 604.8 | 595.8 | 586.8 | 576.0 |
| 157.5° | 671.4 | 662.4 | 655.2 | 642.6 | 639.0 | 633.6 | 624.6 | 615.6 | 608.4 | 599.4 | 590.4 |
| 160°   | 673.2 | 666.0 | 658.8 | 648.0 | 644.4 | 640.8 | 631.8 | 624.6 | 619.2 | 610.2 | 603.0 |
| 162.5° | 673.2 | 667.8 | 660.6 | 651.6 | 648.0 | 644.4 | 639.0 | 631.8 | 628.2 | 621.0 | 613.8 |
| 165°   | 673.2 | 669.6 | 662.4 | 655.2 | 651.6 | 649.8 | 644.4 | 639.0 | 635.4 | 628.2 | 622.8 |
| 167.5° | 671.4 | 667.8 | 662.4 | 657.0 | 655.2 | 651.6 | 648.0 | 642.6 | 640.8 | 637.2 | 630.0 |
| 170°   | 669.6 | 667.8 | 662.4 | 658.8 | 657.0 | 655.2 | 651.6 | 648.0 | 646.2 | 642.6 | 637.2 |
| 172.5° | 666.0 | 666.0 | 662.4 | 658.8 | 657.0 | 655.2 | 651.6 | 649.8 | 649.8 | 646.2 | 642.6 |
| 175°   | 662.4 | 660.6 | 658.8 | 655.2 | 653.4 | 653.4 | 651.6 | 649.8 | 651.6 | 649.8 | 648.0 |
| 177.5° | 653.4 | 655.2 | 651.6 | 651.6 | 649.8 | 649.8 | 649.8 | 649.8 | 651.6 | 651.6 | 649.8 |
| 180°   | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 |



TEST NUMBER: P303130

CATALOG NUMBER: CTW-F-5050-20L940-UNV-STD-8

**CANDELA DISTRIBUTION (continued):**

|        | 100°  | 105°  | 110°  | 112.5° | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  |
|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 700.2 | 700.2 | 700.2 | 700.2  | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 |
| 2.5°   | 702.0 | 700.2 | 698.4 | 698.4  | 698.4 | 694.8 | 694.8 | 696.6 | 698.4 | 702.0 | 698.4 |
| 5°     | 700.2 | 698.4 | 696.6 | 696.6  | 696.6 | 693.0 | 693.0 | 694.8 | 696.6 | 700.2 | 696.6 |
| 7.5°   | 694.8 | 694.8 | 691.2 | 691.2  | 691.2 | 687.6 | 687.6 | 689.4 | 691.2 | 694.8 | 691.2 |
| 10°    | 689.4 | 687.6 | 684.0 | 684.0  | 684.0 | 682.2 | 680.4 | 682.2 | 685.8 | 687.6 | 684.0 |
| 12.5°  | 680.4 | 678.6 | 676.8 | 675.0  | 675.0 | 671.4 | 671.4 | 673.2 | 676.8 | 678.6 | 676.8 |
| 15°    | 669.6 | 667.8 | 666.0 | 664.2  | 664.2 | 662.4 | 660.6 | 662.4 | 666.0 | 667.8 | 664.2 |
| 17.5°  | 657.0 | 655.2 | 653.4 | 651.6  | 651.6 | 649.8 | 648.0 | 649.8 | 653.4 | 653.4 | 651.6 |
| 20°    | 642.6 | 640.8 | 639.0 | 639.0  | 639.0 | 635.4 | 635.4 | 635.4 | 639.0 | 639.0 | 635.4 |
| 22.5°  | 628.2 | 626.4 | 622.8 | 622.8  | 622.8 | 621.0 | 619.2 | 621.0 | 624.6 | 621.0 | 619.2 |
| 25°    | 612.0 | 608.4 | 606.6 | 606.6  | 604.8 | 601.2 | 603.0 | 603.0 | 606.6 | 604.8 | 601.2 |
| 27.5°  | 594.0 | 592.2 | 590.4 | 588.6  | 586.8 | 585.0 | 585.0 | 585.0 | 588.6 | 585.0 | 583.2 |
| 30°    | 574.2 | 572.4 | 570.6 | 568.8  | 568.8 | 565.2 | 565.2 | 567.0 | 568.8 | 565.2 | 563.4 |
| 32.5°  | 552.6 | 550.8 | 549.0 | 549.0  | 547.2 | 545.4 | 545.4 | 545.4 | 547.2 | 543.6 | 541.8 |
| 35°    | 532.8 | 529.2 | 527.4 | 527.4  | 525.6 | 523.8 | 523.8 | 525.6 | 525.6 | 522.0 | 520.2 |
| 37.5°  | 509.4 | 507.6 | 505.8 | 504.0  | 504.0 | 502.2 | 502.2 | 502.2 | 502.2 | 498.6 | 496.8 |
| 40°    | 487.8 | 484.2 | 482.4 | 480.6  | 480.6 | 480.6 | 480.6 | 480.6 | 478.8 | 475.2 | 471.6 |
| 42.5°  | 459.0 | 457.2 | 455.4 | 455.4  | 453.6 | 453.6 | 453.6 | 453.6 | 451.8 | 450.0 | 448.2 |
| 45°    | 435.6 | 433.8 | 432.0 | 430.2  | 432.0 | 432.0 | 430.2 | 430.2 | 428.4 | 426.6 | 424.8 |
| 47.5°  | 412.2 | 410.4 | 408.6 | 406.8  | 408.6 | 408.6 | 406.8 | 406.8 | 405.0 | 405.0 | 401.4 |
| 50°    | 387.0 | 385.2 | 383.4 | 383.4  | 385.2 | 383.4 | 383.4 | 381.6 | 381.6 | 379.8 | 376.2 |
| 52.5°  | 363.6 | 361.8 | 358.2 | 358.2  | 360.0 | 360.0 | 358.2 | 356.4 | 356.4 | 356.4 | 352.8 |
| 55°    | 338.4 | 336.6 | 334.8 | 334.8  | 336.6 | 334.8 | 333.0 | 331.2 | 333.0 | 331.2 | 327.6 |
| 57.5°  | 313.2 | 311.4 | 309.6 | 309.6  | 311.4 | 309.6 | 307.8 | 307.8 | 306.0 | 306.0 | 304.2 |
| 60°    | 288.0 | 286.2 | 284.4 | 286.2  | 286.2 | 284.4 | 282.6 | 282.6 | 282.6 | 279.0 | 279.0 |
| 62.5°  | 262.8 | 259.2 | 259.2 | 259.2  | 261.0 | 259.2 | 257.4 | 257.4 | 255.6 | 253.8 | 253.8 |
| 65°    | 235.8 | 234.0 | 235.8 | 234.0  | 234.0 | 234.0 | 232.2 | 232.2 | 230.4 | 228.6 | 228.6 |
| 67.5°  | 210.6 | 208.8 | 210.6 | 208.8  | 208.8 | 208.8 | 208.8 | 207.0 | 205.2 | 205.2 | 203.4 |
| 70°    | 185.4 | 183.6 | 185.4 | 183.6  | 183.6 | 183.6 | 183.6 | 181.8 | 180.0 | 178.2 | 178.2 |
| 72.5°  | 160.2 | 158.4 | 158.4 | 158.4  | 158.4 | 158.4 | 156.6 | 156.6 | 154.8 | 154.8 | 154.8 |
| 75°    | 135.0 | 133.2 | 133.2 | 133.2  | 133.2 | 131.4 | 131.4 | 131.4 | 129.6 | 129.6 | 129.6 |
| 77.5°  | 109.8 | 108.0 | 109.8 | 109.8  | 108.0 | 108.0 | 108.0 | 108.0 | 106.2 | 104.4 | 104.4 |
| 80°    | 84.6  | 84.6  | 84.6  | 84.6   | 84.6  | 84.6  | 82.8  | 82.8  | 82.8  | 81.0  | 81.0  |
| 82.5°  | 61.2  | 61.2  | 61.2  | 61.2   | 59.4  | 59.4  | 59.4  | 59.4  | 57.6  | 55.8  | 55.8  |
| 85°    | 37.8  | 37.8  | 37.8  | 37.8   | 36.0  | 37.8  | 36.0  | 34.2  | 34.2  | 32.4  | 30.6  |
| 87.5°  | 18.0  | 18.0  | 16.2  | 14.4   | 14.4  | 14.4  | 12.6  | 14.4  | 12.6  | 10.8  | 10.8  |
| 90°    | 1.8   | 1.8   | 1.8   | 1.8    | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   |
| 92.5°  | 9.0   | 10.8  | 12.6  | 12.6   | 12.6  | 10.8  | 10.8  | 10.8  | 10.8  | 10.8  | 9.0   |
| 95°    | 14.4  | 18.0  | 19.8  | 21.6   | 23.4  | 25.2  | 25.2  | 25.2  | 23.4  | 23.4  | 23.4  |
| 97.5°  | 23.4  | 25.2  | 27.0  | 27.0   | 28.8  | 30.6  | 34.2  | 36.0  | 37.8  | 39.6  | 37.8  |
| 100°   | 36.0  | 34.2  | 37.8  | 37.8   | 37.8  | 37.8  | 39.6  | 41.4  | 45.0  | 46.8  | 48.6  |
| 102.5° | 50.4  | 46.8  | 46.8  | 48.6   | 48.6  | 50.4  | 50.4  | 50.4  | 52.2  | 54.0  | 55.8  |
| 105°   | 68.4  | 63.0  | 61.2  | 59.4   | 59.4  | 61.2  | 64.8  | 64.8  | 64.8  | 64.8  | 64.8  |
| 107.5° | 90.0  | 82.8  | 75.6  | 73.8   | 72.0  | 73.8  | 75.6  | 79.2  | 81.0  | 81.0  | 79.2  |
| 110°   | 115.2 | 104.4 | 95.4  | 91.8   | 88.2  | 86.4  | 88.2  | 88.2  | 91.8  | 95.4  | 97.2  |



TEST NUMBER: P303130

CATALOG NUMBER: CTW-F-5050-20L940-UNV-STD-8

**CANDELA DISTRIBUTION (continued):**

|        | 100°  | 105°  | 110°  | 112.5° | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  |
|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 144.0 | 127.8 | 115.2 | 113.4  | 108.0 | 102.6 | 100.8 | 100.8 | 102.6 | 104.4 | 108.0 |
| 115°   | 171.0 | 154.8 | 140.4 | 135.0  | 129.6 | 120.6 | 117.0 | 113.4 | 115.2 | 115.2 | 118.8 |
| 117.5° | 203.4 | 183.6 | 167.4 | 160.2  | 153.0 | 142.2 | 133.2 | 129.6 | 127.8 | 127.8 | 127.8 |
| 120°   | 234.0 | 216.0 | 194.4 | 187.2  | 180.0 | 167.4 | 156.6 | 147.6 | 142.2 | 138.6 | 138.6 |
| 122.5° | 262.8 | 244.8 | 225.0 | 216.0  | 207.0 | 194.4 | 181.8 | 169.2 | 162.0 | 154.8 | 151.2 |
| 125°   | 293.4 | 275.4 | 253.8 | 246.6  | 235.8 | 221.4 | 208.8 | 196.2 | 185.4 | 176.4 | 169.2 |
| 127.5° | 322.2 | 304.2 | 282.6 | 273.6  | 266.4 | 252.0 | 235.8 | 223.2 | 210.6 | 201.6 | 190.8 |
| 130°   | 349.2 | 331.2 | 311.4 | 302.4  | 295.2 | 280.8 | 264.6 | 252.0 | 239.4 | 228.6 | 216.0 |
| 132.5° | 376.2 | 358.2 | 340.2 | 331.2  | 322.2 | 309.6 | 293.4 | 280.8 | 266.4 | 255.6 | 246.6 |
| 135°   | 401.4 | 383.4 | 367.2 | 358.2  | 351.0 | 336.6 | 322.2 | 309.6 | 295.2 | 284.4 | 275.4 |
| 137.5° | 426.6 | 408.6 | 392.4 | 383.4  | 376.2 | 363.6 | 351.0 | 338.4 | 324.0 | 313.2 | 302.4 |
| 140°   | 448.2 | 432.0 | 415.8 | 408.6  | 401.4 | 388.8 | 378.0 | 367.2 | 354.6 | 342.0 | 331.2 |
| 142.5° | 471.6 | 455.4 | 441.0 | 432.0  | 424.8 | 412.2 | 401.4 | 392.4 | 381.6 | 369.0 | 360.0 |
| 145°   | 495.0 | 477.0 | 464.4 | 453.6  | 448.2 | 435.6 | 424.8 | 417.6 | 408.6 | 397.8 | 388.8 |
| 147.5° | 513.0 | 498.6 | 487.8 | 480.6  | 471.6 | 459.0 | 448.2 | 441.0 | 433.8 | 423.0 | 415.8 |
| 150°   | 531.0 | 518.4 | 505.8 | 502.2  | 495.0 | 484.2 | 475.2 | 466.2 | 459.0 | 448.2 | 441.0 |
| 152.5° | 550.8 | 536.4 | 527.4 | 520.2  | 514.8 | 504.0 | 495.0 | 489.6 | 486.0 | 473.4 | 468.0 |
| 155°   | 567.0 | 554.4 | 543.6 | 538.2  | 534.6 | 523.8 | 514.8 | 511.2 | 505.8 | 498.6 | 491.4 |
| 157.5° | 581.4 | 570.6 | 559.8 | 554.4  | 552.6 | 541.8 | 534.6 | 529.2 | 525.6 | 520.2 | 513.0 |
| 160°   | 594.0 | 585.0 | 574.2 | 570.6  | 567.0 | 558.0 | 550.8 | 547.2 | 545.4 | 540.0 | 534.6 |
| 162.5° | 606.6 | 597.6 | 588.6 | 585.0  | 581.4 | 574.2 | 567.0 | 563.4 | 561.6 | 558.0 | 552.6 |
| 165°   | 615.6 | 608.4 | 601.2 | 597.6  | 595.8 | 586.8 | 581.4 | 579.6 | 577.8 | 576.0 | 570.6 |
| 167.5° | 626.4 | 619.2 | 612.0 | 610.2  | 606.6 | 601.2 | 595.8 | 594.0 | 592.2 | 592.2 | 586.8 |
| 170°   | 633.6 | 628.2 | 622.8 | 621.0  | 619.2 | 612.0 | 608.4 | 606.6 | 606.6 | 606.6 | 601.2 |
| 172.5° | 640.8 | 637.2 | 630.0 | 630.0  | 628.2 | 622.8 | 619.2 | 619.2 | 617.4 | 619.2 | 613.8 |
| 175°   | 646.2 | 642.6 | 637.2 | 637.2  | 635.4 | 631.8 | 628.2 | 628.2 | 630.0 | 631.8 | 626.4 |
| 177.5° | 649.8 | 646.2 | 642.6 | 642.6  | 640.8 | 639.0 | 635.4 | 637.2 | 639.0 | 640.8 | 637.2 |
| 180°   | 648.0 | 648.0 | 648.0 | 648.0  | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 |



TEST NUMBER: P303130

CATALOG NUMBER: CTW-F-5050-20L940-UNV-STD-8

**CANDELA DISTRIBUTION (continued):**

|        | 150°  | 155°  | 157.5° | 160°  | 165°  | 170°  | 175°  | 180°  |
|--------|-------|-------|--------|-------|-------|-------|-------|-------|
| 0°     | 700.2 | 700.2 | 700.2  | 700.2 | 700.2 | 700.2 | 700.2 | 700.2 |
| 2.5°   | 702.0 | 700.2 | 698.4  | 698.4 | 696.6 | 696.6 | 696.6 | 696.6 |
| 5°     | 698.4 | 696.6 | 696.6  | 694.8 | 694.8 | 694.8 | 696.6 | 696.6 |
| 7.5°   | 694.8 | 691.2 | 691.2  | 689.4 | 689.4 | 689.4 | 691.2 | 691.2 |
| 10°    | 685.8 | 685.8 | 684.0  | 682.2 | 682.2 | 682.2 | 682.2 | 684.0 |
| 12.5°  | 676.8 | 675.0 | 675.0  | 671.4 | 671.4 | 673.2 | 673.2 | 675.0 |
| 15°    | 666.0 | 664.2 | 662.4  | 662.4 | 662.4 | 662.4 | 662.4 | 664.2 |
| 17.5°  | 653.4 | 651.6 | 649.8  | 648.0 | 648.0 | 649.8 | 649.8 | 649.8 |
| 20°    | 637.2 | 633.6 | 633.6  | 631.8 | 631.8 | 631.8 | 633.6 | 633.6 |
| 22.5°  | 619.2 | 615.6 | 615.6  | 613.8 | 613.8 | 615.6 | 615.6 | 615.6 |
| 25°    | 601.2 | 599.4 | 597.6  | 595.8 | 595.8 | 595.8 | 597.6 | 597.6 |
| 27.5°  | 583.2 | 579.6 | 579.6  | 577.8 | 577.8 | 577.8 | 577.8 | 577.8 |
| 30°    | 563.4 | 559.8 | 558.0  | 558.0 | 556.2 | 556.2 | 558.0 | 558.0 |
| 32.5°  | 540.0 | 538.2 | 536.4  | 536.4 | 534.6 | 536.4 | 536.4 | 536.4 |
| 35°    | 518.4 | 514.8 | 514.8  | 514.8 | 513.0 | 514.8 | 513.0 | 513.0 |
| 37.5°  | 496.8 | 491.4 | 491.4  | 491.4 | 491.4 | 491.4 | 491.4 | 491.4 |
| 40°    | 469.8 | 466.2 | 466.2  | 464.4 | 464.4 | 464.4 | 464.4 | 464.4 |
| 42.5°  | 446.4 | 442.8 | 442.8  | 441.0 | 441.0 | 441.0 | 441.0 | 441.0 |
| 45°    | 423.0 | 419.4 | 419.4  | 419.4 | 417.6 | 417.6 | 417.6 | 415.8 |
| 47.5°  | 397.8 | 396.0 | 396.0  | 394.2 | 394.2 | 394.2 | 394.2 | 394.2 |
| 50°    | 374.4 | 372.6 | 372.6  | 370.8 | 372.6 | 370.8 | 370.8 | 370.8 |
| 52.5°  | 349.2 | 349.2 | 347.4  | 347.4 | 347.4 | 345.6 | 345.6 | 345.6 |
| 55°    | 325.8 | 324.0 | 324.0  | 322.2 | 324.0 | 322.2 | 322.2 | 322.2 |
| 57.5°  | 300.6 | 300.6 | 300.6  | 298.8 | 298.8 | 297.0 | 297.0 | 297.0 |
| 60°    | 275.4 | 275.4 | 275.4  | 273.6 | 275.4 | 273.6 | 273.6 | 273.6 |
| 62.5°  | 252.0 | 252.0 | 250.2  | 250.2 | 250.2 | 248.4 | 248.4 | 248.4 |
| 65°    | 226.8 | 225.0 | 225.0  | 226.8 | 225.0 | 225.0 | 225.0 | 225.0 |
| 67.5°  | 203.4 | 203.4 | 201.6  | 201.6 | 201.6 | 199.8 | 199.8 | 199.8 |
| 70°    | 178.2 | 178.2 | 176.4  | 176.4 | 176.4 | 174.6 | 176.4 | 174.6 |
| 72.5°  | 153.0 | 153.0 | 151.2  | 153.0 | 151.2 | 149.4 | 151.2 | 151.2 |
| 75°    | 127.8 | 127.8 | 127.8  | 127.8 | 127.8 | 126.0 | 126.0 | 126.0 |
| 77.5°  | 104.4 | 104.4 | 102.6  | 102.6 | 102.6 | 102.6 | 102.6 | 100.8 |
| 80°    | 79.2  | 79.2  | 77.4   | 77.4  | 77.4  | 77.4  | 77.4  | 75.6  |
| 82.5°  | 55.8  | 54.0  | 54.0   | 54.0  | 54.0  | 52.2  | 52.2  | 52.2  |
| 85°    | 30.6  | 30.6  | 30.6   | 30.6  | 28.8  | 30.6  | 28.8  | 28.8  |
| 87.5°  | 10.8  | 10.8  | 10.8   | 9.0   | 9.0   | 10.8  | 10.8  | 9.0   |
| 90°    | 1.8   | 1.8   | 3.6    | 3.6   | 3.6   | 3.6   | 3.6   | 3.6   |
| 92.5°  | 9.0   | 9.0   | 9.0    | 7.2   | 7.2   | 7.2   | 7.2   | 7.2   |
| 95°    | 23.4  | 23.4  | 23.4   | 21.6  | 21.6  | 23.4  | 21.6  | 21.6  |
| 97.5°  | 37.8  | 37.8  | 37.8   | 37.8  | 36.0  | 37.8  | 36.0  | 36.0  |
| 100°   | 48.6  | 50.4  | 50.4   | 50.4  | 50.4  | 50.4  | 50.4  | 52.2  |
| 102.5° | 57.6  | 57.6  | 57.6   | 57.6  | 59.4  | 59.4  | 59.4  | 59.4  |
| 105°   | 66.6  | 66.6  | 66.6   | 68.4  | 68.4  | 70.2  | 70.2  | 70.2  |
| 107.5° | 79.2  | 79.2  | 79.2   | 79.2  | 81.0  | 81.0  | 81.0  | 81.0  |
| 110°   | 97.2  | 97.2  | 95.4   | 95.4  | 93.6  | 93.6  | 93.6  | 93.6  |



TEST NUMBER: P303130

CATALOG NUMBER: CTW-F-5050-20L940-UNV-STD-8

**CANDELA DISTRIBUTION (continued):**

|        | 150°  | 155°  | 157.5° | 160°  | 165°  | 170°  | 175°  | 180°  |
|--------|-------|-------|--------|-------|-------|-------|-------|-------|
| 112.5° | 111.6 | 113.4 | 113.4  | 113.4 | 113.4 | 113.4 | 113.4 | 113.4 |
| 115°   | 120.6 | 124.2 | 124.2  | 126.0 | 126.0 | 127.8 | 127.8 | 127.8 |
| 117.5° | 129.6 | 133.2 | 133.2  | 135.0 | 135.0 | 136.8 | 138.6 | 138.6 |
| 120°   | 140.4 | 142.2 | 142.2  | 144.0 | 144.0 | 145.8 | 145.8 | 145.8 |
| 122.5° | 151.2 | 151.2 | 151.2  | 153.0 | 153.0 | 153.0 | 154.8 | 154.8 |
| 125°   | 165.6 | 163.8 | 163.8  | 162.0 | 162.0 | 162.0 | 162.0 | 163.8 |
| 127.5° | 185.4 | 180.0 | 178.2  | 178.2 | 176.4 | 174.6 | 174.6 | 172.8 |
| 130°   | 207.0 | 203.4 | 199.8  | 198.0 | 194.4 | 192.6 | 190.8 | 190.8 |
| 132.5° | 235.8 | 228.6 | 225.0  | 221.4 | 217.8 | 214.2 | 214.2 | 212.4 |
| 135°   | 266.4 | 257.4 | 255.6  | 250.2 | 246.6 | 243.0 | 239.4 | 239.4 |
| 137.5° | 293.4 | 286.2 | 284.4  | 280.8 | 277.2 | 271.8 | 271.8 | 268.2 |
| 140°   | 322.2 | 315.0 | 311.4  | 307.8 | 304.2 | 300.6 | 300.6 | 300.6 |
| 142.5° | 351.0 | 343.8 | 340.2  | 336.6 | 333.0 | 329.4 | 327.6 | 329.4 |
| 145°   | 379.8 | 372.6 | 369.0  | 365.4 | 361.8 | 358.2 | 356.4 | 354.6 |
| 147.5° | 406.8 | 399.6 | 396.0  | 394.2 | 390.6 | 387.0 | 385.2 | 383.4 |
| 150°   | 433.8 | 426.6 | 424.8  | 421.2 | 417.6 | 414.0 | 412.2 | 412.2 |
| 152.5° | 459.0 | 453.6 | 450.0  | 446.4 | 444.6 | 441.0 | 439.2 | 439.2 |
| 155°   | 486.0 | 480.6 | 477.0  | 475.2 | 471.6 | 468.0 | 468.0 | 464.4 |
| 157.5° | 509.4 | 504.0 | 500.4  | 498.6 | 495.0 | 493.2 | 493.2 | 493.2 |
| 160°   | 531.0 | 525.6 | 523.8  | 520.2 | 516.6 | 516.6 | 516.6 | 516.6 |
| 162.5° | 550.8 | 547.2 | 545.4  | 541.8 | 538.2 | 538.2 | 538.2 | 536.4 |
| 165°   | 568.8 | 565.2 | 563.4  | 559.8 | 558.0 | 558.0 | 558.0 | 558.0 |
| 167.5° | 586.8 | 581.4 | 579.6  | 577.8 | 576.0 | 576.0 | 576.0 | 576.0 |
| 170°   | 601.2 | 597.6 | 595.8  | 594.0 | 592.2 | 592.2 | 592.2 | 592.2 |
| 172.5° | 615.6 | 613.8 | 612.0  | 608.4 | 608.4 | 608.4 | 610.2 | 608.4 |
| 175°   | 628.2 | 626.4 | 624.6  | 622.8 | 621.0 | 622.8 | 622.8 | 622.8 |
| 177.5° | 639.0 | 637.2 | 637.2  | 635.4 | 633.6 | 631.8 | 633.6 | 631.8 |
| 180°   | 648.0 | 648.0 | 648.0  | 648.0 | 648.0 | 648.0 | 648.0 | 648.0 |

(END OF REPORT)