

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: NEO-RAY

Report Number: P331416

Luminaire Tested: **SA2XXDIP-C865D1080U835-4F0-1E-UDD-D4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331416  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXDIP-C865D1080U835-4F0-1E-UDD-D4  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 865 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1080 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

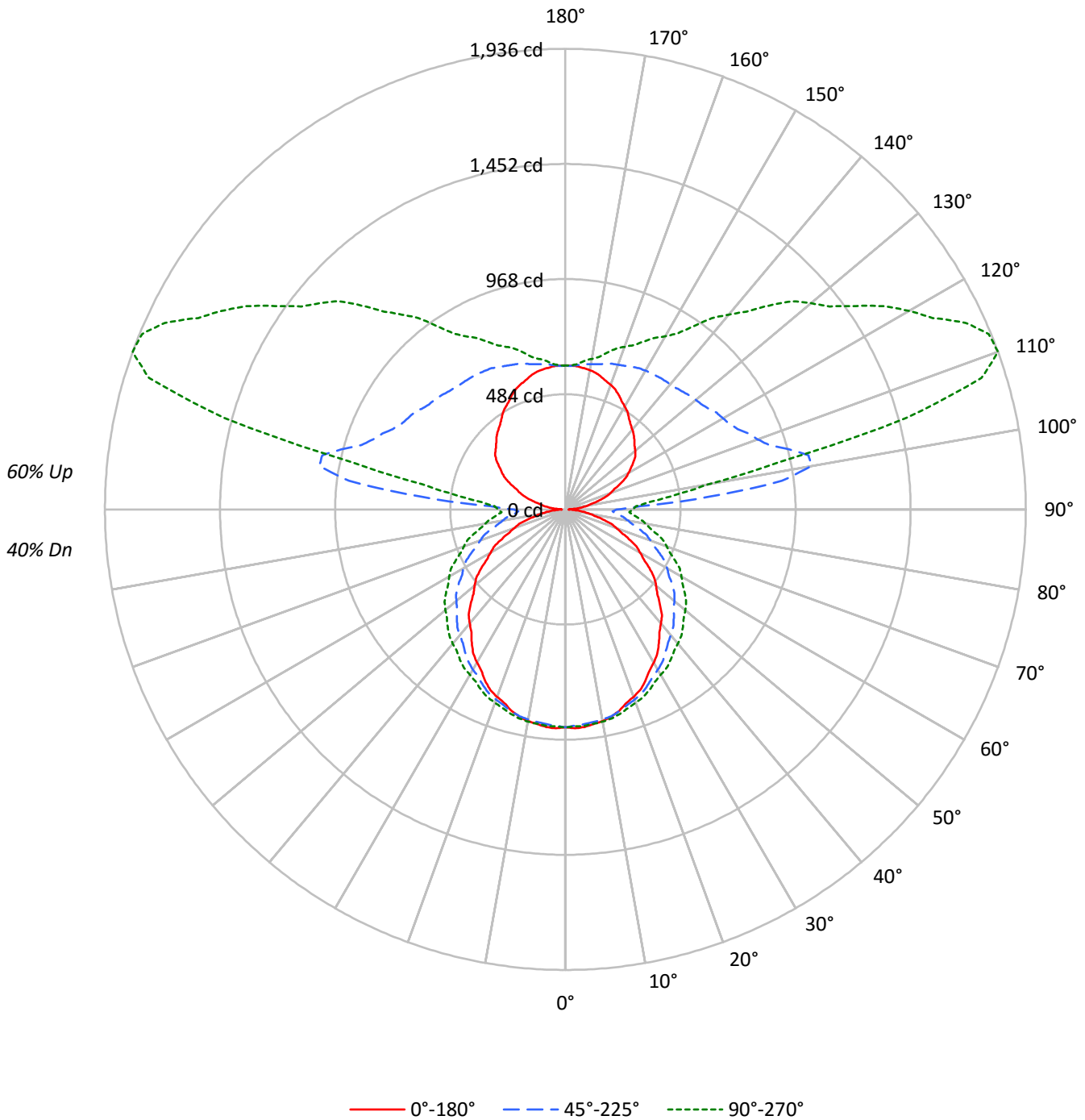
Lumens per Lamp: N/A  
Luminaire Lumens: 7702.0 lumens  
Efficiency: N/A  
Efficacy: 117.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

Input Watts (W): 65.4  
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



TEST NUMBER: P331416  
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### Luminous Intensity Polar Plot





TEST NUMBER: P331416

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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 | 0  |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 105 | 105 | 105 | 105 | 95 | 95 | 95 | 95 | 78 | 78 | 78 | 62 | 62 | 62 | 47 | 47 | 47 | 40 |
| 1   | 94  | 90  | 85  | 81  | 86 | 82 | 78 | 75 | 66 | 64 | 61 | 53 | 51 | 49 | 40 | 39 | 37 | 31 |
| 2   | 85  | 78  | 71  | 65  | 77 | 71 | 65 | 60 | 58 | 53 | 50 | 45 | 43 | 40 | 34 | 32 | 31 | 25 |
| 3   | 78  | 68  | 60  | 54  | 70 | 62 | 55 | 50 | 50 | 45 | 41 | 40 | 36 | 33 | 30 | 28 | 26 | 21 |
| 4   | 71  | 60  | 51  | 45  | 64 | 54 | 47 | 42 | 44 | 39 | 35 | 35 | 31 | 28 | 27 | 24 | 22 | 18 |
| 5   | 65  | 53  | 45  | 38  | 59 | 48 | 41 | 35 | 40 | 34 | 30 | 31 | 27 | 24 | 24 | 21 | 19 | 15 |
| 6   | 60  | 47  | 39  | 33  | 54 | 43 | 36 | 31 | 35 | 30 | 26 | 28 | 24 | 21 | 21 | 19 | 16 | 13 |
| 7   | 55  | 42  | 34  | 29  | 50 | 39 | 32 | 27 | 32 | 26 | 22 | 26 | 21 | 18 | 20 | 17 | 14 | 12 |
| 8   | 51  | 38  | 31  | 25  | 46 | 35 | 28 | 23 | 29 | 24 | 20 | 23 | 19 | 16 | 18 | 15 | 13 | 10 |
| 9   | 47  | 35  | 27  | 22  | 43 | 32 | 25 | 21 | 27 | 21 | 18 | 21 | 17 | 14 | 16 | 14 | 11 | 9  |
| 10  | 44  | 32  | 25  | 20  | 40 | 29 | 23 | 18 | 24 | 19 | 16 | 20 | 16 | 13 | 15 | 12 | 10 | 8  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 14783 | 14783 | 14783 |
| 5°  | 14855 | 14230 | 14176 |
| 10° | 14762 | 13809 | 13655 |
| 15° | 14558 | 13364 | 13106 |
| 20° | 14300 | 12888 | 12577 |
| 25° | 14048 | 12428 | 12096 |
| 30° | 13689 | 11955 | 11614 |
| 35° | 13327 | 11498 | 11275 |
| 40° | 12947 | 11110 | 10935 |
| 45° | 12584 | 10762 | 10645 |
| 50° | 12196 | 10448 | 10360 |
| 55° | 11790 | 10109 | 10067 |
| 60° | 11292 | 9759  | 9760  |
| 65° | 10774 | 9347  | 9393  |
| 70° | 10189 | 8905  | 8999  |
| 75° | 9446  | 8470  | 8637  |
| 80° | 8274  | 8029  | 8266  |
| 85° | 7152  | 7646  | 7981  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 86.8   | 1.1       |
| 10°-20°   | 248.8  | 3.2       |
| 20°-30°   | 377.0  | 4.9       |
| 30°-40°   | 459.2  | 6.0       |
| 40°-50°   | 494.0  | 6.4       |
| 50°-60°   | 479.7  | 6.2       |
| 60°-70°   | 418.9  | 5.4       |
| 70°-80°   | 322.5  | 4.2       |
| 80°-90°   | 221.9  | 2.9       |
| 90°-100°  | 390.6  | 5.1       |
| 100°-110° | 928.5  | 12.1      |
| 110°-120° | 942.6  | 12.2      |
| 120°-130° | 756.9  | 9.8       |
| 130°-140° | 592.5  | 7.7       |
| 140°-150° | 437.9  | 5.7       |
| 150°-160° | 305.7  | 4.0       |
| 160°-170° | 180.0  | 2.3       |
| 170°-180° | 58.6   | 0.8       |
| 0°-30°    | 712.5  | 9.3       |
| 0°-40°    | 1171.7 | 15.2      |
| 0°-60°    | 2145.5 | 27.9      |
| 0°-90°    | 3108.7 | 40.4      |
| 90°-120°  | 2261.8 | 29.4      |
| 90°-150°  | 4049.1 | 52.6      |
| 90°-180°  | 4593.0 | 59.6      |
| 0°-180°   | 7702.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90°  | Flux |
|------|-----|-------|-----|-------|------|------|
| 0°   | 916 | 916   | 916 | 916   | 916  |      |
| 5°   | 918 | 914   | 906 | 914   | 913  | 87   |
| 15°  | 876 | 878   | 878 | 890   | 889  | 247  |
| 25°  | 796 | 806   | 817 | 833   | 837  | 366  |
| 35°  | 686 | 709   | 734 | 762   | 772  | 429  |
| 45°  | 563 | 599   | 645 | 684   | 699  | 434  |
| 55°  | 431 | 480   | 548 | 594   | 613  | 385  |
| 65°  | 295 | 360   | 438 | 490   | 510  | 293  |
| 75°  | 163 | 238   | 322 | 377   | 397  | 173  |
| 85°  | 48  | 130   | 215 | 269   | 289  | 51   |
| 90°  | 14  | 106   | 215 | 264   | 282  | 11   |
| 95°  | 51  | 174   | 608 | 373   | 351  | 52   |
| 105° | 148 | 261   | 975 | 1697  | 1484 | 158  |
| 115° | 255 | 338   | 800 | 1604  | 1857 | 252  |
| 125° | 351 | 417   | 738 | 1284  | 1490 | 312  |
| 135° | 410 | 490   | 699 | 1053  | 1211 | 317  |
| 145° | 467 | 537   | 681 | 853   | 939  | 293  |
| 155° | 531 | 573   | 661 | 748   | 777  | 244  |
| 165° | 578 | 596   | 633 | 671   | 682  | 163  |
| 175° | 603 | 604   | 609 | 616   | 614  | 57   |
| 180° | 604 | 604   | 604 | 604   | 604  |      |



TEST NUMBER: P331416

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°    | 50°    |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| 0°     | 915.6 | 915.6 | 915.6 | 915.6 | 915.6 | 915.6 | 915.6 | 915.6 | 915.6 | 915.6  | 915.6  |
| 2.5°   | 920.9 | 920.2 | 919.5 | 918.8 | 918.1 | 916.9 | 915.2 | 913.6 | 911.9 | 910.3  | 911.5  |
| 5°     | 918.2 | 917.4 | 916.5 | 915.6 | 914.7 | 913.4 | 911.6 | 909.8 | 908.1 | 906.3  | 908.1  |
| 7.5°   | 910.0 | 909.4 | 908.8 | 908.3 | 907.7 | 906.7 | 905.3 | 904.0 | 902.6 | 901.3  | 903.4  |
| 10°    | 903.7 | 903.1 | 902.5 | 901.9 | 901.3 | 900.6 | 899.7 | 898.8 | 897.9 | 897.0  | 899.4  |
| 12.5°  | 893.0 | 893.2 | 893.3 | 893.4 | 893.5 | 893.2 | 892.6 | 891.9 | 891.3 | 890.6  | 893.0  |
| 15°    | 875.8 | 876.4 | 877.0 | 877.6 | 878.1 | 878.4 | 878.4 | 878.4 | 878.4 | 878.4  | 881.1  |
| 17.5°  | 853.5 | 854.7 | 856.0 | 857.2 | 858.4 | 859.5 | 860.5 | 861.4 | 862.4 | 863.3  | 866.1  |
| 20°    | 838.6 | 840.1 | 841.6 | 843.1 | 844.5 | 845.9 | 847.0 | 848.2 | 849.4 | 850.6  | 853.8  |
| 22.5°  | 822.7 | 824.4 | 826.1 | 827.8 | 829.5 | 831.2 | 832.9 | 834.5 | 836.2 | 837.8  | 841.1  |
| 25°    | 796.2 | 798.2 | 800.3 | 802.4 | 804.4 | 806.8 | 809.4 | 812.1 | 814.7 | 817.4  | 820.9  |
| 27.5°  | 764.3 | 767.7 | 771.0 | 774.4 | 777.8 | 781.0 | 784.1 | 787.3 | 790.4 | 793.5  | 798.0  |
| 30°    | 743.1 | 746.9 | 750.8 | 754.6 | 758.4 | 762.3 | 766.1 | 769.9 | 773.8 | 777.6  | 782.3  |
| 32.5°  | 719.7 | 724.0 | 728.3 | 732.7 | 737.0 | 741.4 | 745.9 | 750.5 | 755.0 | 759.5  | 765.0  |
| 35°    | 686.0 | 691.0 | 696.1 | 701.1 | 706.1 | 711.4 | 717.0 | 722.6 | 728.2 | 733.8  | 740.3  |
| 37.5°  | 649.4 | 655.2 | 661.0 | 666.7 | 672.5 | 679.0 | 686.3 | 693.6 | 700.8 | 708.1  | 715.3  |
| 40°    | 625.0 | 631.5 | 638.0 | 644.5 | 650.9 | 658.2 | 666.1 | 674.1 | 682.1 | 690.0  | 697.7  |
| 42.5°  | 601.6 | 608.1 | 614.6 | 621.1 | 627.6 | 635.4 | 644.5 | 653.7 | 662.8 | 672.0  | 680.3  |
| 45°    | 562.6 | 570.6 | 578.5 | 586.5 | 594.5 | 603.6 | 613.9 | 624.3 | 634.6 | 644.9  | 654.0  |
| 47.5°  | 524.1 | 532.8 | 541.5 | 550.2 | 558.8 | 569.2 | 581.3 | 593.4 | 605.5 | 617.6  | 627.1  |
| 50°    | 497.6 | 506.7 | 515.9 | 525.0 | 534.2 | 545.4 | 558.6 | 571.9 | 585.2 | 598.5  | 608.5  |
| 52.5°  | 472.1 | 481.7 | 491.4 | 501.0 | 510.6 | 522.4 | 536.4 | 550.3 | 564.3 | 578.3  | 588.5  |
| 55°    | 431.3 | 441.9 | 452.5 | 463.1 | 473.7 | 486.7 | 502.0 | 517.4 | 532.7 | 548.0  | 558.6  |
| 57.5°  | 390.9 | 402.9 | 414.9 | 426.8 | 438.8 | 452.6 | 468.2 | 483.9 | 499.5 | 515.1  | 526.6  |
| 60°    | 362.3 | 374.9 | 387.6 | 400.3 | 413.0 | 427.7 | 444.5 | 461.3 | 478.1 | 495.0  | 506.2  |
| 62.5°  | 336.8 | 349.9 | 363.1 | 376.2 | 389.4 | 404.4 | 421.2 | 438.0 | 454.8 | 471.6  | 483.5  |
| 65°    | 294.6 | 309.0 | 323.5 | 337.9 | 352.4 | 368.3 | 385.7 | 403.1 | 420.5 | 437.9  | 450.0  |
| 67.5°  | 255.8 | 270.9 | 286.0 | 301.1 | 316.2 | 332.7 | 350.5 | 368.3 | 386.1 | 403.9  | 416.1  |
| 70°    | 228.2 | 243.6 | 258.9 | 274.2 | 289.6 | 306.4 | 324.7 | 342.9 | 361.2 | 379.5  | 392.2  |
| 72.5°  | 202.8 | 218.6 | 234.4 | 250.2 | 266.0 | 283.1 | 301.7 | 320.2 | 338.7 | 357.2  | 369.7  |
| 75°    | 163.2 | 179.7 | 196.2 | 212.8 | 229.3 | 247.0 | 265.8 | 284.7 | 303.6 | 322.4  | 335.1  |
| 77.5°  | 125.0 | 142.3 | 159.6 | 176.8 | 194.1 | 212.3 | 231.5 | 250.7 | 269.8 | 289.0  | 301.6  |
| 80°    | 99.5  | 117.5 | 135.5 | 153.5 | 171.5 | 190.0 | 209.2 | 228.4 | 247.5 | 266.7  | 279.1  |
| 82.5°  | 78.3  | 96.0  | 113.8 | 131.5 | 149.3 | 167.9 | 187.3 | 206.7 | 226.1 | 245.5  | 257.9  |
| 85°    | 47.8  | 66.1  | 84.3  | 102.6 | 120.9 | 139.5 | 158.3 | 177.2 | 196.1 | 215.0  | 227.4  |
| 87.5°  | 26.2  | 44.5  | 63.0  | 81.1  | 99.1  | 118.0 | 138.0 | 158.5 | 178.8 | 197.9  | 209.7  |
| 90°    | 14.4  | 35.0  | 56.8  | 76.2  | 95.6  | 117.1 | 141.8 | 168.8 | 194.6 | 214.7  | 225.3  |
| 92.5°  | 26.4  | 48.6  | 72.9  | 93.9  | 117.7 | 145.7 | 190.1 | 245.2 | 296.4 | 316.6  | 304.7  |
| 95°    | 51.3  | 69.8  | 95.3  | 119.6 | 152.0 | 195.7 | 266.8 | 385.6 | 538.0 | 608.0  | 562.3  |
| 97.5°  | 75.5  | 94.1  | 118.7 | 146.9 | 180.6 | 226.8 | 310.9 | 468.7 | 709.7 | 918.6  | 967.6  |
| 100°   | 98.7  | 113.1 | 134.5 | 164.0 | 198.1 | 244.4 | 322.5 | 480.7 | 748.1 | 1050.4 | 1228.6 |
| 102.5° | 119.1 | 131.6 | 152.0 | 180.5 | 214.7 | 260.2 | 333.2 | 475.1 | 723.5 | 1047.6 | 1321.3 |
| 105°   | 148.4 | 161.6 | 178.2 | 204.2 | 238.3 | 282.8 | 352.7 | 471.4 | 678.5 | 974.9  | 1294.2 |
| 107.5° | 181.5 | 192.1 | 206.8 | 229.7 | 261.9 | 305.4 | 373.1 | 477.9 | 651.0 | 898.1  | 1181.0 |
| 110°   | 202.8 | 213.3 | 226.2 | 247.2 | 277.5 | 321.4 | 386.9 | 485.0 | 641.2 | 860.1  | 1110.0 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°    |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 112.5° | 223.2 | 232.8 | 245.7 | 264.8 | 293.2 | 337.2 | 400.2 | 492.9 | 635.4 | 832.2 | 1057.9 |
| 115°   | 255.1 | 264.1 | 274.3 | 291.5 | 318.0 | 357.6 | 420.8 | 505.0 | 630.9 | 799.9 | 992.2  |
| 117.5° | 286.7 | 293.5 | 302.6 | 317.0 | 341.5 | 381.2 | 439.7 | 518.4 | 629.4 | 778.1 | 946.4  |
| 120°   | 307.2 | 313.0 | 321.2 | 332.8 | 357.2 | 396.2 | 453.3 | 527.8 | 629.1 | 765.2 | 921.0  |
| 122.5° | 326.7 | 330.9 | 338.3 | 350.2 | 373.9 | 413.1 | 466.7 | 535.9 | 629.9 | 755.1 | 898.6  |
| 125°   | 351.2 | 354.6 | 361.6 | 375.6 | 398.8 | 436.0 | 487.3 | 549.0 | 630.5 | 737.5 | 865.1  |
| 127.5° | 371.6 | 376.0 | 385.4 | 400.5 | 422.5 | 459.6 | 507.8 | 562.4 | 632.7 | 724.0 | 834.0  |
| 130°   | 383.7 | 388.0 | 399.4 | 415.3 | 438.3 | 473.7 | 520.6 | 570.9 | 635.2 | 715.7 | 813.4  |
| 132.5° | 394.8 | 400.1 | 412.4 | 429.3 | 453.1 | 487.9 | 531.5 | 579.5 | 637.7 | 708.4 | 795.7  |
| 135°   | 410.2 | 414.9 | 428.8 | 446.2 | 473.0 | 507.0 | 547.1 | 590.7 | 640.1 | 698.8 | 771.2  |
| 137.5° | 426.0 | 431.6 | 445.4 | 464.0 | 490.4 | 521.2 | 559.2 | 598.4 | 642.0 | 690.9 | 751.8  |
| 140°   | 438.1 | 442.5 | 456.1 | 474.4 | 499.7 | 530.0 | 565.5 | 602.1 | 642.1 | 685.7 | 740.4  |
| 142.5° | 450.2 | 453.6 | 466.3 | 484.6 | 509.0 | 537.2 | 571.3 | 606.5 | 643.3 | 683.6 | 730.8  |
| 145°   | 467.0 | 471.6 | 483.3 | 500.7 | 523.9 | 549.5 | 580.8 | 613.4 | 645.9 | 680.7 | 719.7  |
| 147.5° | 486.5 | 490.0 | 501.1 | 517.2 | 536.5 | 559.2 | 588.7 | 617.3 | 646.8 | 676.6 | 709.3  |
| 150°   | 499.5 | 503.0 | 512.3 | 527.4 | 544.8 | 565.7 | 592.5 | 619.2 | 645.9 | 673.8 | 701.6  |
| 152.5° | 512.5 | 514.2 | 523.4 | 536.7 | 553.2 | 572.2 | 596.2 | 620.1 | 644.0 | 669.1 | 695.1  |
| 155°   | 530.9 | 532.0 | 539.0 | 551.8 | 564.6 | 582.0 | 601.7 | 621.5 | 641.2 | 661.0 | 683.1  |
| 157.5° | 546.2 | 547.4 | 553.0 | 564.1 | 574.3 | 589.0 | 605.7 | 621.5 | 635.9 | 652.6 | 671.7  |
| 160°   | 556.4 | 557.6 | 562.2 | 571.5 | 580.8 | 593.6 | 607.6 | 621.5 | 633.1 | 647.1 | 663.3  |
| 162.5° | 566.7 | 566.0 | 570.6 | 578.0 | 586.4 | 596.4 | 608.5 | 620.6 | 630.3 | 642.4 | 655.9  |
| 165°   | 578.5 | 577.4 | 579.7 | 586.6 | 592.5 | 599.4 | 609.9 | 618.0 | 625.0 | 633.1 | 643.6  |
| 167.5° | 588.3 | 586.9 | 589.0 | 593.4 | 597.6 | 602.0 | 609.6 | 616.4 | 619.6 | 625.0 | 631.5  |
| 170°   | 594.8 | 592.5 | 593.6 | 597.1 | 599.4 | 602.9 | 608.7 | 614.5 | 616.8 | 620.3 | 625.0  |
| 172.5° | 598.5 | 597.1 | 596.4 | 599.9 | 601.3 | 603.8 | 607.8 | 611.7 | 613.1 | 614.8 | 618.5  |
| 175°   | 602.9 | 601.7 | 600.6 | 602.9 | 602.9 | 604.1 | 606.4 | 608.7 | 607.6 | 608.7 | 609.9  |
| 177.5° | 605.0 | 603.1 | 602.2 | 604.1 | 604.1 | 604.1 | 605.0 | 606.9 | 605.0 | 604.1 | 605.0  |
| 180°   | 604.1 | 604.1 | 604.1 | 604.1 | 604.1 | 604.1 | 604.1 | 604.1 | 604.1 | 604.1 | 604.1  |



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**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 915.6  | 915.6  | 915.6  | 915.6  | 915.6  | 915.6  | 915.6  | 915.6  |
| 2.5°   | 912.6  | 913.8  | 915.0  | 915.4  | 914.9  | 914.4  | 913.9  | 913.5  |
| 5°     | 909.8  | 911.6  | 913.4  | 914.1  | 913.8  | 913.5  | 913.2  | 912.9  |
| 7.5°   | 905.5  | 907.6  | 909.8  | 910.7  | 910.4  | 910.1  | 909.8  | 909.5  |
| 10°    | 901.7  | 904.1  | 906.5  | 907.5  | 907.2  | 906.9  | 906.6  | 906.3  |
| 12.5°  | 895.4  | 897.7  | 900.1  | 901.1  | 900.8  | 900.5  | 900.2  | 899.9  |
| 15°    | 883.7  | 886.4  | 889.1  | 890.2  | 889.9  | 889.6  | 889.3  | 889.1  |
| 17.5°  | 868.9  | 871.6  | 874.4  | 875.8  | 875.8  | 875.8  | 875.8  | 875.8  |
| 20°    | 857.1  | 860.3  | 863.5  | 865.2  | 865.2  | 865.2  | 865.2  | 865.2  |
| 22.5°  | 844.3  | 847.6  | 850.8  | 852.7  | 853.1  | 853.6  | 854.1  | 854.6  |
| 25°    | 824.5  | 828.0  | 831.6  | 833.8  | 834.6  | 835.5  | 836.4  | 837.3  |
| 27.5°  | 802.5  | 807.0  | 811.4  | 814.0  | 814.7  | 815.3  | 816.0  | 816.6  |
| 30°    | 787.0  | 791.7  | 796.5  | 799.3  | 800.1  | 801.0  | 801.9  | 802.8  |
| 32.5°  | 770.4  | 775.8  | 781.2  | 784.8  | 786.3  | 787.9  | 789.5  | 791.1  |
| 35°    | 746.8  | 753.3  | 759.8  | 764.0  | 766.1  | 768.2  | 770.2  | 772.3  |
| 37.5°  | 722.4  | 729.6  | 736.8  | 741.5  | 743.7  | 745.9  | 748.1  | 750.3  |
| 40°    | 705.3  | 713.0  | 720.7  | 725.8  | 728.5  | 731.1  | 733.8  | 736.5  |
| 42.5°  | 688.7  | 697.1  | 705.5  | 711.0  | 713.6  | 716.3  | 718.9  | 721.6  |
| 45°    | 663.2  | 672.3  | 681.5  | 687.5  | 690.5  | 693.4  | 696.4  | 699.3  |
| 47.5°  | 636.7  | 646.2  | 655.8  | 662.2  | 665.4  | 668.7  | 671.9  | 675.2  |
| 50°    | 618.5  | 628.5  | 638.6  | 645.2  | 648.4  | 651.7  | 654.9  | 658.2  |
| 52.5°  | 598.8  | 609.1  | 619.3  | 626.2  | 629.7  | 633.2  | 636.6  | 640.1  |
| 55°    | 569.3  | 579.9  | 590.5  | 597.7  | 601.5  | 605.4  | 609.2  | 613.0  |
| 57.5°  | 538.0  | 549.4  | 560.9  | 568.6  | 572.4  | 576.3  | 580.2  | 584.1  |
| 60°    | 517.4  | 528.6  | 539.8  | 547.4  | 551.6  | 555.7  | 559.8  | 564.0  |
| 62.5°  | 495.4  | 507.3  | 519.2  | 527.2  | 531.0  | 534.9  | 538.8  | 542.7  |
| 65°    | 462.1  | 474.2  | 486.3  | 494.2  | 498.0  | 501.9  | 505.7  | 509.5  |
| 67.5°  | 428.3  | 440.5  | 452.8  | 460.9  | 464.9  | 468.9  | 472.9  | 476.9  |
| 70°    | 404.9  | 417.5  | 430.2  | 438.3  | 441.9  | 445.4  | 449.0  | 452.5  |
| 72.5°  | 382.1  | 394.5  | 407.0  | 415.3  | 419.6  | 423.8  | 428.1  | 432.3  |
| 75°    | 347.8  | 360.5  | 373.2  | 381.4  | 385.3  | 389.1  | 392.9  | 396.8  |
| 77.5°  | 314.3  | 326.9  | 339.5  | 347.9  | 352.0  | 356.1  | 360.3  | 364.4  |
| 80°    | 291.5  | 303.9  | 316.3  | 324.5  | 328.6  | 332.8  | 336.9  | 341.0  |
| 82.5°  | 270.3  | 282.6  | 295.0  | 303.2  | 307.1  | 310.9  | 314.8  | 318.7  |
| 85°    | 239.7  | 252.1  | 264.5  | 272.8  | 276.9  | 281.0  | 285.1  | 289.3  |
| 87.5°  | 221.5  | 233.1  | 245.6  | 253.7  | 257.5  | 261.3  | 265.0  | 268.8  |
| 90°    | 235.9  | 245.4  | 259.5  | 268.3  | 271.9  | 275.4  | 279.0  | 282.5  |
| 92.5°  | 290.0  | 287.2  | 289.0  | 289.3  | 291.9  | 291.8  | 296.2  | 297.9  |
| 95°    | 479.4  | 419.7  | 382.1  | 363.9  | 352.4  | 346.6  | 346.7  | 351.4  |
| 97.5°  | 873.3  | 755.0  | 640.2  | 563.5  | 511.5  | 486.4  | 472.9  | 466.6  |
| 100°   | 1215.1 | 1082.0 | 933.7  | 800.3  | 707.1  | 660.4  | 629.9  | 612.3  |
| 102.5° | 1436.8 | 1414.9 | 1309.2 | 1167.2 | 1065.7 | 983.7  | 944.8  | 919.7  |
| 105°   | 1546.2 | 1687.8 | 1713.2 | 1681.6 | 1612.9 | 1544.1 | 1497.4 | 1484.4 |
| 107.5° | 1447.1 | 1654.7 | 1785.5 | 1848.3 | 1860.6 | 1859.9 | 1853.1 | 1834.8 |
| 110°   | 1364.5 | 1581.9 | 1740.0 | 1841.6 | 1894.8 | 1920.1 | 1933.8 | 1935.9 |





TEST NUMBER: P331416

CATALOG NUMBER: SA2XXDIP-C865D1080U835-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 1288.3 | 1497.3 | 1665.7 | 1781.2 | 1853.9 | 1894.1 | 1917.1 | 1926.6 |
| 115°   | 1192.8 | 1380.5 | 1541.5 | 1667.2 | 1753.0 | 1809.6 | 1843.1 | 1856.8 |
| 117.5° | 1118.0 | 1283.8 | 1430.5 | 1548.6 | 1635.7 | 1695.2 | 1730.0 | 1741.8 |
| 120°   | 1079.1 | 1231.4 | 1362.8 | 1474.2 | 1558.8 | 1616.6 | 1653.6 | 1668.4 |
| 122.5° | 1047.1 | 1187.1 | 1311.8 | 1412.7 | 1488.4 | 1544.8 | 1577.6 | 1590.1 |
| 125°   | 999.7  | 1127.3 | 1237.5 | 1329.9 | 1399.9 | 1446.7 | 1478.4 | 1490.4 |
| 127.5° | 952.8  | 1068.4 | 1172.1 | 1257.5 | 1318.8 | 1362.8 | 1390.5 | 1400.5 |
| 130°   | 922.7  | 1029.7 | 1128.6 | 1210.0 | 1269.2 | 1311.1 | 1336.7 | 1348.3 |
| 132.5° | 893.6  | 992.9  | 1084.1 | 1160.7 | 1219.1 | 1260.9 | 1284.6 | 1295.4 |
| 135°   | 852.9  | 935.8  | 1018.7 | 1088.0 | 1140.3 | 1181.0 | 1204.3 | 1211.3 |
| 137.5° | 818.8  | 888.4  | 954.7  | 1015.1 | 1062.6 | 1097.6 | 1118.0 | 1127.0 |
| 140°   | 797.4  | 857.9  | 916.0  | 970.4  | 1009.3 | 1041.3 | 1060.5 | 1069.2 |
| 142.5° | 780.4  | 831.5  | 881.3  | 926.7  | 963.6  | 992.5  | 1009.6 | 1012.5 |
| 145°   | 757.5  | 797.6  | 835.3  | 870.7  | 900.0  | 921.2  | 934.3  | 939.3  |
| 147.5° | 740.2  | 770.7  | 799.0  | 824.1  | 847.8  | 864.3  | 872.9  | 875.7  |
| 150°   | 729.5  | 755.1  | 779.5  | 800.4  | 817.8  | 831.8  | 838.7  | 839.9  |
| 152.5° | 719.3  | 743.0  | 763.7  | 781.8  | 795.5  | 807.6  | 812.7  | 812.9  |
| 155°   | 705.1  | 723.7  | 741.1  | 753.9  | 766.7  | 774.8  | 779.5  | 777.2  |
| 157.5° | 688.6  | 704.2  | 718.8  | 728.8  | 737.9  | 744.6  | 746.7  | 746.7  |
| 160°   | 678.4  | 691.2  | 704.0  | 712.1  | 720.2  | 726.0  | 727.2  | 727.2  |
| 162.5° | 668.2  | 679.1  | 690.0  | 696.3  | 704.4  | 708.4  | 709.5  | 708.6  |
| 165°   | 652.9  | 661.0  | 669.1  | 673.8  | 678.4  | 683.1  | 683.1  | 681.9  |
| 167.5° | 638.2  | 644.5  | 650.1  | 654.3  | 656.3  | 658.9  | 658.7  | 657.3  |
| 170°   | 630.8  | 634.3  | 638.9  | 641.2  | 642.4  | 645.9  | 644.7  | 642.4  |
| 172.5° | 622.4  | 625.0  | 628.7  | 630.1  | 631.3  | 632.9  | 631.7  | 630.3  |
| 175°   | 613.4  | 614.5  | 615.7  | 616.8  | 616.8  | 618.0  | 616.8  | 614.5  |
| 177.5° | 606.9  | 606.9  | 607.8  | 607.8  | 607.8  | 607.8  | 606.9  | 605.0  |
| 180°   | 604.1  | 604.1  | 604.1  | 604.1  | 604.1  | 604.1  | 604.1  | 604.1  |

(END OF REPORT)