

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: P332657-927

Luminaire Tested: **SA4XXDIP-C1020D1035U927-4F0-1E-UDD-D4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332657-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXDIP-C1020D1035U927-4F0-1E-UDD-D4  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6264.0 lumens  
Efficiency: N/A  
Efficacy: 103.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

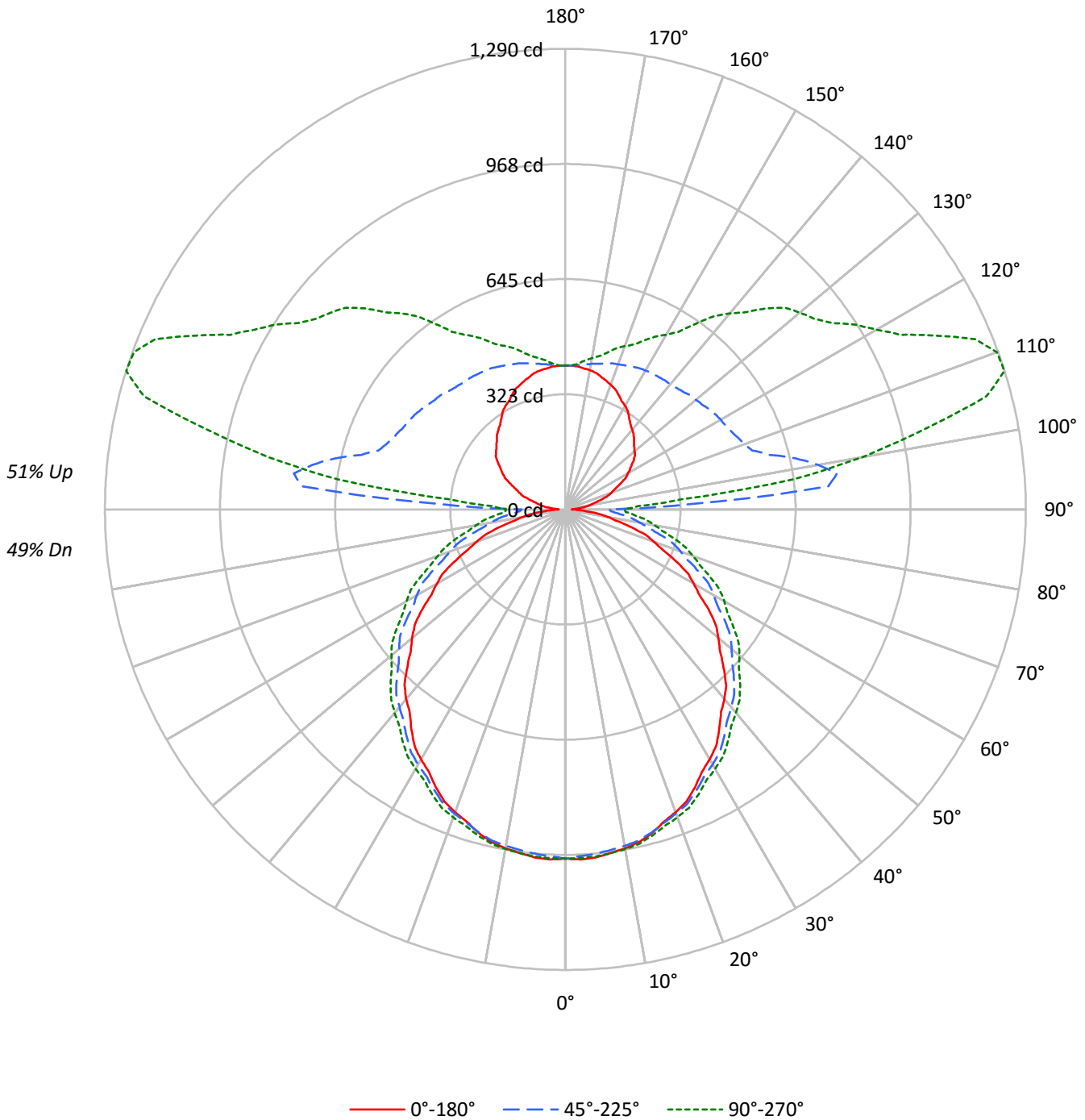
Input Watts (W): 60.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P332657-927

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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   | 107 | 107 | 107 | 107 | 99 | 99 | 99 | 99 | 83 | 83 | 83 | 69 | 69 | 69 | 55 | 55 | 55 | 49 |
| 1   | 97  | 92  | 88  | 84  | 89 | 85 | 81 | 78 | 71 | 68 | 66 | 59 | 57 | 55 | 47 | 46 | 45 | 39 |
| 2   | 88  | 80  | 73  | 68  | 80 | 73 | 68 | 63 | 62 | 58 | 54 | 51 | 48 | 45 | 41 | 39 | 37 | 32 |
| 3   | 80  | 70  | 62  | 56  | 73 | 64 | 57 | 52 | 54 | 49 | 45 | 45 | 41 | 38 | 36 | 33 | 31 | 27 |
| 4   | 73  | 61  | 53  | 47  | 66 | 57 | 49 | 44 | 48 | 42 | 38 | 40 | 35 | 32 | 32 | 29 | 26 | 23 |
| 5   | 67  | 55  | 46  | 40  | 61 | 50 | 43 | 37 | 43 | 37 | 32 | 35 | 31 | 28 | 29 | 25 | 23 | 19 |
| 6   | 61  | 49  | 40  | 34  | 56 | 45 | 38 | 32 | 38 | 32 | 28 | 32 | 27 | 24 | 26 | 23 | 20 | 17 |
| 7   | 57  | 44  | 36  | 30  | 52 | 41 | 33 | 28 | 35 | 29 | 25 | 29 | 24 | 21 | 24 | 20 | 18 | 15 |
| 8   | 52  | 40  | 32  | 26  | 48 | 37 | 30 | 25 | 32 | 26 | 22 | 26 | 22 | 19 | 22 | 18 | 16 | 13 |
| 9   | 49  | 36  | 29  | 23  | 45 | 34 | 27 | 22 | 29 | 23 | 19 | 24 | 20 | 17 | 20 | 17 | 14 | 12 |
| 10  | 46  | 33  | 26  | 21  | 42 | 31 | 24 | 20 | 27 | 21 | 17 | 22 | 18 | 15 | 19 | 15 | 13 | 11 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7896 | 7896 | 7896 |
| 5°  | 7920 | 7717 | 7739 |
| 10° | 7872 | 7591 | 7585 |
| 15° | 7802 | 7444 | 7404 |
| 20° | 7695 | 7284 | 7227 |
| 25° | 7575 | 7102 | 7034 |
| 30° | 7445 | 6922 | 6835 |
| 35° | 7299 | 6739 | 6660 |
| 40° | 7181 | 6564 | 6478 |
| 45° | 7007 | 6402 | 6322 |
| 50° | 6859 | 6215 | 6158 |
| 55° | 6707 | 6040 | 5964 |
| 60° | 6469 | 5816 | 5788 |
| 65° | 6208 | 5578 | 5571 |
| 70° | 5894 | 5303 | 5319 |
| 75° | 5453 | 5001 | 5089 |
| 80° | 4964 | 4711 | 4865 |
| 85° | 4347 | 4456 | 4735 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 92.6   | 1.5       |
| 10°-20°   | 265.4  | 4.2       |
| 20°-30°   | 401.3  | 6.4       |
| 30°-40°   | 485.5  | 7.8       |
| 40°-50°   | 513.3  | 8.2       |
| 50°-60°   | 483.1  | 7.7       |
| 60°-70°   | 400.8  | 6.4       |
| 70°-80°   | 281.5  | 4.5       |
| 80°-90°   | 161.4  | 2.6       |
| 90°-100°  | 385.2  | 6.2       |
| 100°-110° | 675.1  | 10.8      |
| 110°-120° | 589.0  | 9.4       |
| 120°-130° | 482.4  | 7.7       |
| 130°-140° | 391.6  | 6.3       |
| 140°-150° | 292.7  | 4.7       |
| 150°-160° | 204.1  | 3.3       |
| 160°-170° | 120.1  | 1.9       |
| 170°-180° | 39.1   | 0.6       |
| 0°-30°    | 759.3  | 12.1      |
| 0°-40°    | 1244.8 | 19.9      |
| 0°-60°    | 2241.1 | 35.8      |
| 0°-90°    | 3084.7 | 49.2      |
| 90°-120°  | 1649.3 | 26.3      |
| 90°-150°  | 2816.0 | 45.0      |
| 90°-180°  | 3179.0 | 50.8      |
| 0°-180°   | 6264.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90°  | Flux |
|------|-----|-------|-----|-------|------|------|
| 0°   | 978 | 978   | 978 | 978   | 978  |      |
| 5°   | 979 | 976   | 968 | 976   | 976  | 93   |
| 15°  | 939 | 940   | 936 | 946   | 945  | 264  |
| 25°  | 859 | 865   | 868 | 880   | 882  | 395  |
| 35°  | 751 | 764   | 776 | 790   | 794  | 470  |
| 45°  | 626 | 647   | 668 | 686   | 692  | 484  |
| 55°  | 491 | 514   | 546 | 568   | 575  | 437  |
| 65°  | 340 | 375   | 412 | 438   | 448  | 336  |
| 75°  | 188 | 229   | 275 | 304   | 315  | 200  |
| 85°  | 58  | 104   | 153 | 185   | 197  | 62   |
| 90°  | 18  | 68    | 123 | 155   | 166  | 13   |
| 95°  | 40  | 133   | 740 | 443   | 328  | 41   |
| 105° | 102 | 167   | 591 | 1216  | 1221 | 110  |
| 115° | 169 | 222   | 514 | 964   | 1152 | 168  |
| 125° | 231 | 275   | 491 | 807   | 911  | 206  |
| 135° | 272 | 324   | 466 | 698   | 796  | 210  |
| 145° | 312 | 356   | 454 | 573   | 633  | 196  |
| 155° | 354 | 382   | 441 | 500   | 521  | 163  |
| 165° | 385 | 397   | 423 | 448   | 455  | 109  |
| 175° | 402 | 402   | 406 | 411   | 410  | 38   |
| 180° | 402 | 402   | 402 | 402   | 402  |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 |
| 2.5°   | 981.6 | 981.0 | 980.4 | 979.9 | 979.2 | 978.2 | 976.6 | 975.1 | 973.5 | 971.9 | 973.3 |
| 5°     | 979.1 | 978.4 | 977.7 | 977.0 | 976.3 | 975.0 | 973.4 | 971.6 | 969.9 | 968.2 | 970.2 |
| 7.5°   | 970.8 | 970.4 | 969.9 | 969.6 | 969.1 | 968.2 | 966.8 | 965.4 | 963.9 | 962.5 | 964.7 |
| 10°    | 963.8 | 963.6 | 963.4 | 963.1 | 962.9 | 962.1 | 960.9 | 959.7 | 958.5 | 957.3 | 959.5 |
| 12.5°  | 954.2 | 954.2 | 954.1 | 954.0 | 954.0 | 953.5 | 952.8 | 951.9 | 951.1 | 950.2 | 952.3 |
| 15°    | 938.7 | 938.9 | 939.1 | 939.4 | 939.6 | 939.4 | 938.7 | 937.9 | 937.2 | 936.4 | 938.7 |
| 17.5°  | 917.4 | 918.1 | 918.9 | 919.6 | 920.4 | 920.6 | 920.4 | 920.4 | 920.2 | 920.0 | 922.3 |
| 20°    | 902.5 | 903.2 | 904.0 | 904.7 | 905.5 | 905.9 | 906.2 | 906.4 | 906.7 | 906.9 | 909.3 |
| 22.5°  | 885.8 | 886.8 | 887.7 | 888.7 | 889.5 | 890.3 | 890.7 | 891.1 | 891.5 | 892.0 | 894.5 |
| 25°    | 858.7 | 860.2 | 861.6 | 863.1 | 864.5 | 865.6 | 866.3 | 867.1 | 867.8 | 868.5 | 871.2 |
| 27.5°  | 828.5 | 830.6 | 832.7 | 834.9 | 837.0 | 838.7 | 839.8 | 840.9 | 842.0 | 843.1 | 845.7 |
| 30°    | 808.3 | 810.2 | 812.2 | 814.1 | 816.1 | 817.9 | 819.6 | 821.3 | 823.0 | 824.7 | 827.4 |
| 32.5°  | 786.4 | 788.8 | 791.1 | 793.4 | 795.7 | 797.9 | 799.8 | 801.7 | 803.6 | 805.5 | 808.5 |
| 35°    | 751.4 | 754.3 | 757.2 | 760.1 | 763.0 | 765.7 | 768.2 | 770.6 | 773.0 | 775.5 | 778.9 |
| 37.5°  | 716.1 | 719.5 | 722.8 | 726.2 | 729.5 | 732.7 | 735.7 | 738.7 | 741.8 | 744.8 | 748.2 |
| 40°    | 693.3 | 696.5 | 699.7 | 702.8 | 706.0 | 709.2 | 712.6 | 716.1 | 719.5 | 722.9 | 726.5 |
| 42.5°  | 667.0 | 670.6 | 674.1 | 677.7 | 681.2 | 685.0 | 689.0 | 693.0 | 697.0 | 701.0 | 705.0 |
| 45°    | 626.5 | 631.1 | 635.7 | 640.4 | 645.0 | 649.6 | 654.3 | 658.9 | 663.5 | 668.1 | 672.2 |
| 47.5°  | 587.7 | 592.5 | 597.2 | 602.1 | 606.8 | 611.9 | 617.2 | 622.6 | 628.0 | 633.3 | 637.5 |
| 50°    | 559.7 | 565.1 | 570.4 | 575.8 | 581.1 | 586.5 | 591.8 | 597.1 | 602.5 | 607.8 | 612.8 |
| 52.5°  | 531.6 | 537.0 | 542.3 | 547.7 | 553.1 | 558.8 | 564.9 | 571.1 | 577.2 | 583.4 | 588.2 |
| 55°    | 490.7 | 495.8 | 500.9 | 506.0 | 511.1 | 517.3 | 524.7 | 532.0 | 539.2 | 546.5 | 551.4 |
| 57.5°  | 444.9 | 451.2 | 457.6 | 463.9 | 470.2 | 477.0 | 484.3 | 491.5 | 498.8 | 506.0 | 511.8 |
| 60°    | 415.1 | 421.4 | 427.8 | 434.1 | 440.5 | 447.6 | 455.7 | 463.7 | 471.7 | 479.7 | 485.3 |
| 62.5°  | 386.2 | 393.1 | 400.1 | 406.9 | 413.8 | 421.3 | 429.4 | 437.4 | 445.4 | 453.4 | 459.1 |
| 65°    | 339.5 | 347.3 | 355.1 | 362.9 | 370.7 | 378.7 | 387.0 | 395.3 | 403.5 | 411.9 | 417.9 |
| 67.5°  | 294.6 | 302.9 | 311.2 | 319.5 | 327.7 | 336.3 | 345.2 | 354.0 | 362.9 | 371.8 | 378.0 |
| 70°    | 264.0 | 272.3 | 280.5 | 288.8 | 297.1 | 305.9 | 315.1 | 324.3 | 333.6 | 342.9 | 349.4 |
| 72.5°  | 234.2 | 242.6 | 251.1 | 259.6 | 268.1 | 277.2 | 287.0 | 296.8 | 306.7 | 316.6 | 322.9 |
| 75°    | 188.4 | 197.4 | 206.4 | 215.4 | 224.4 | 234.0 | 244.2 | 254.4 | 264.7 | 274.9 | 281.7 |
| 77.5°  | 145.7 | 155.2 | 164.8 | 174.3 | 183.9 | 193.9 | 204.7 | 215.4 | 226.1 | 236.8 | 243.7 |
| 80°    | 119.4 | 129.1 | 138.9 | 148.6 | 158.4 | 168.6 | 179.3 | 190.0 | 200.7 | 211.4 | 218.7 |
| 82.5°  | 93.1  | 103.2 | 113.4 | 123.5 | 133.6 | 144.0 | 154.7 | 165.4 | 176.2 | 186.9 | 194.3 |
| 85°    | 58.1  | 68.3  | 78.5  | 88.7  | 98.9  | 109.6 | 120.5 | 131.4 | 142.4 | 153.4 | 160.7 |
| 87.5°  | 32.6  | 42.9  | 53.2  | 63.3  | 73.4  | 83.7  | 95.3  | 106.0 | 116.9 | 127.9 | 134.8 |
| 90°    | 18.3  | 29.6  | 41.7  | 52.3  | 62.8  | 72.9  | 88.1  | 98.5  | 110.6 | 122.6 | 129.0 |
| 92.5°  | 25.7  | 38.5  | 54.7  | 73.1  | 93.5  | 119.5 | 170.2 | 242.0 | 312.3 | 354.0 | 319.0 |
| 95°    | 40.3  | 50.8  | 66.7  | 85.0  | 112.0 | 154.2 | 233.0 | 372.7 | 571.7 | 739.8 | 764.6 |
| 97.5°  | 59.7  | 66.6  | 80.4  | 96.8  | 119.9 | 156.2 | 219.0 | 336.0 | 533.9 | 767.4 | 927.5 |
| 100°   | 72.2  | 78.5  | 90.3  | 106.2 | 127.5 | 160.7 | 216.9 | 315.8 | 486.6 | 719.1 | 928.1 |
| 102.5° | 84.8  | 91.7  | 102.1 | 116.5 | 136.4 | 167.9 | 219.4 | 307.3 | 453.9 | 660.9 | 876.1 |
| 105°   | 102.3 | 109.6 | 118.4 | 132.8 | 151.9 | 181.8 | 228.8 | 303.4 | 423.1 | 591.0 | 783.0 |
| 107.5° | 124.0 | 129.6 | 137.5 | 151.6 | 169.2 | 198.1 | 241.4 | 309.7 | 412.8 | 549.3 | 706.9 |
| 110°   | 137.7 | 142.7 | 150.0 | 163.0 | 180.5 | 207.9 | 251.2 | 315.1 | 410.6 | 533.8 | 668.3 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 150.7 | 155.3 | 163.0 | 174.8 | 192.0 | 219.0 | 260.6 | 321.0 | 410.4 | 523.7 | 644.1 |
| 115°   | 169.4 | 174.0 | 181.8 | 191.9 | 209.1 | 235.4 | 274.9 | 330.1 | 411.5 | 514.1 | 619.1 |
| 117.5° | 190.1 | 193.7 | 199.9 | 209.9 | 225.3 | 251.8 | 289.1 | 339.9 | 413.1 | 506.8 | 604.0 |
| 120°   | 203.2 | 205.5 | 211.8 | 221.2 | 235.4 | 261.4 | 298.5 | 346.7 | 414.6 | 502.4 | 595.0 |
| 122.5° | 215.9 | 217.5 | 223.2 | 231.5 | 246.3 | 271.2 | 307.9 | 353.2 | 416.4 | 497.3 | 585.6 |
| 125°   | 231.3 | 234.2 | 238.8 | 247.2 | 262.0 | 287.1 | 321.6 | 364.1 | 420.0 | 490.9 | 571.5 |
| 127.5° | 245.8 | 248.1 | 253.6 | 263.3 | 278.7 | 303.2 | 335.4 | 373.5 | 421.7 | 482.6 | 553.4 |
| 130°   | 253.2 | 256.1 | 262.2 | 273.8 | 288.6 | 313.4 | 344.1 | 378.9 | 423.1 | 477.6 | 542.1 |
| 132.5° | 261.4 | 263.7 | 271.7 | 282.7 | 298.7 | 321.9 | 351.8 | 385.2 | 424.8 | 473.5 | 532.1 |
| 135°   | 271.9 | 275.0 | 283.0 | 296.4 | 313.0 | 334.4 | 362.2 | 392.4 | 426.5 | 466.2 | 515.9 |
| 137.5° | 283.4 | 286.2 | 294.6 | 307.2 | 324.2 | 344.1 | 369.3 | 396.7 | 426.3 | 461.0 | 502.3 |
| 140°   | 291.6 | 293.7 | 302.2 | 315.4 | 331.8 | 350.8 | 374.7 | 400.3 | 427.4 | 457.7 | 494.9 |
| 142.5° | 299.6 | 302.0 | 310.0 | 322.7 | 338.7 | 356.9 | 379.9 | 403.1 | 428.6 | 456.0 | 488.9 |
| 145°   | 311.9 | 314.0 | 321.7 | 332.6 | 347.3 | 364.6 | 385.2 | 406.5 | 429.4 | 453.9 | 480.7 |
| 147.5° | 326.0 | 326.5 | 333.3 | 344.4 | 356.6 | 372.2 | 391.5 | 410.1 | 430.2 | 451.1 | 473.6 |
| 150°   | 334.9 | 335.4 | 341.4 | 350.7 | 362.3 | 377.2 | 394.7 | 412.0 | 430.2 | 449.2 | 469.0 |
| 152.5° | 342.1 | 342.3 | 348.6 | 357.4 | 367.9 | 381.7 | 397.2 | 413.3 | 429.0 | 446.0 | 463.9 |
| 155°   | 353.5 | 354.3 | 359.0 | 366.9 | 375.7 | 387.5 | 400.9 | 414.4 | 427.1 | 441.3 | 456.3 |
| 157.5° | 364.7 | 364.7 | 369.2 | 375.3 | 382.9 | 392.3 | 403.6 | 414.4 | 425.0 | 436.4 | 448.5 |
| 160°   | 371.7 | 371.7 | 374.9 | 380.4 | 386.7 | 395.5 | 404.9 | 414.4 | 423.1 | 432.6 | 442.9 |
| 162.5° | 378.0 | 377.4 | 379.9 | 384.8 | 390.5 | 397.4 | 406.2 | 414.4 | 421.2 | 428.8 | 437.8 |
| 165°   | 385.2 | 385.2 | 386.7 | 390.7 | 394.7 | 399.3 | 406.5 | 412.8 | 417.6 | 423.1 | 429.4 |
| 167.5° | 392.3 | 391.5 | 392.3 | 395.3 | 397.5 | 401.1 | 406.3 | 410.9 | 413.8 | 417.4 | 421.8 |
| 170°   | 395.5 | 394.7 | 395.5 | 397.8 | 399.3 | 401.7 | 405.7 | 409.6 | 411.2 | 413.6 | 416.8 |
| 172.5° | 398.5 | 397.8 | 397.9 | 399.7 | 400.6 | 402.3 | 405.0 | 408.4 | 408.7 | 409.8 | 412.3 |
| 175°   | 401.7 | 400.9 | 400.9 | 401.7 | 402.5 | 402.5 | 404.1 | 406.5 | 405.7 | 405.7 | 407.3 |
| 177.5° | 403.1 | 402.5 | 401.9 | 402.5 | 402.5 | 402.5 | 403.1 | 404.4 | 403.1 | 403.1 | 403.8 |
| 180°   | 402.5 | 402.5 | 402.5 | 402.5 | 402.5 | 402.5 | 402.5 | 402.5 | 402.5 | 402.5 | 402.5 |



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**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 978.1  | 978.1  | 978.1  | 978.1  | 978.1  | 978.1  | 978.1  | 978.1  |
| 2.5°   | 974.7  | 976.0  | 977.4  | 977.9  | 977.8  | 977.6  | 977.4  | 977.2  |
| 5°     | 972.1  | 974.1  | 976.0  | 976.8  | 976.6  | 976.4  | 976.1  | 975.9  |
| 7.5°   | 966.9  | 969.1  | 971.3  | 972.2  | 972.0  | 971.8  | 971.5  | 971.3  |
| 10°    | 961.6  | 963.8  | 966.1  | 967.0  | 966.8  | 966.5  | 966.3  | 966.1  |
| 12.5°  | 954.3  | 956.2  | 958.2  | 959.3  | 959.2  | 959.1  | 959.1  | 959.0  |
| 15°    | 940.9  | 943.0  | 945.2  | 946.2  | 945.9  | 945.7  | 945.5  | 945.2  |
| 17.5°  | 924.5  | 926.8  | 929.0  | 930.0  | 929.8  | 929.6  | 929.4  | 929.2  |
| 20°    | 911.7  | 914.2  | 916.6  | 917.8  | 917.8  | 917.8  | 917.8  | 917.8  |
| 22.5°  | 896.8  | 899.3  | 901.7  | 903.2  | 903.6  | 903.9  | 904.3  | 904.7  |
| 25°    | 873.9  | 876.5  | 879.2  | 880.7  | 881.0  | 881.2  | 881.5  | 881.7  |
| 27.5°  | 848.1  | 850.6  | 853.1  | 854.4  | 854.8  | 855.1  | 855.3  | 855.6  |
| 30°    | 830.1  | 832.7  | 835.4  | 837.0  | 837.5  | 838.0  | 838.5  | 839.0  |
| 32.5°  | 811.6  | 814.7  | 817.8  | 819.5  | 820.0  | 820.5  | 820.9  | 821.5  |
| 35°    | 782.3  | 785.7  | 789.1  | 791.2  | 791.9  | 792.6  | 793.4  | 794.1  |
| 37.5°  | 751.7  | 755.2  | 758.6  | 760.7  | 761.5  | 762.3  | 763.0  | 763.8  |
| 40°    | 730.2  | 733.8  | 737.5  | 739.8  | 740.8  | 741.7  | 742.8  | 743.7  |
| 42.5°  | 709.1  | 713.1  | 717.2  | 719.5  | 720.3  | 721.1  | 721.9  | 722.6  |
| 45°    | 676.4  | 680.6  | 684.7  | 687.4  | 688.6  | 689.8  | 691.0  | 692.2  |
| 47.5°  | 641.8  | 646.1  | 650.5  | 653.3  | 654.7  | 656.2  | 657.7  | 659.2  |
| 50°    | 617.6  | 622.5  | 627.3  | 630.5  | 632.0  | 633.4  | 634.9  | 636.4  |
| 52.5°  | 593.1  | 597.9  | 602.9  | 605.9  | 607.4  | 608.9  | 610.4  | 611.8  |
| 55°    | 556.3  | 561.2  | 566.0  | 569.2  | 570.6  | 572.1  | 573.5  | 575.0  |
| 57.5°  | 517.6  | 523.4  | 529.2  | 532.7  | 534.1  | 535.5  | 536.9  | 538.2  |
| 60°    | 490.9  | 496.5  | 502.1  | 505.9  | 507.9  | 509.8  | 511.7  | 513.7  |
| 62.5°  | 464.6  | 470.2  | 475.9  | 479.6  | 481.6  | 483.5  | 485.4  | 487.4  |
| 65°    | 424.0  | 430.1  | 436.2  | 440.2  | 442.1  | 444.1  | 446.0  | 448.0  |
| 67.5°  | 384.1  | 390.3  | 396.5  | 400.5  | 402.4  | 404.3  | 406.2  | 408.1  |
| 70°    | 355.9  | 362.5  | 369.1  | 373.3  | 374.9  | 376.7  | 378.3  | 380.1  |
| 72.5°  | 329.3  | 335.6  | 342.1  | 346.2  | 348.1  | 350.0  | 351.9  | 353.8  |
| 75°    | 288.5  | 295.3  | 302.1  | 306.7  | 308.9  | 311.1  | 313.2  | 315.4  |
| 77.5°  | 250.6  | 257.5  | 264.4  | 269.1  | 271.4  | 273.8  | 276.1  | 278.5  |
| 80°    | 226.0  | 233.3  | 240.6  | 245.2  | 247.2  | 249.1  | 251.0  | 253.0  |
| 82.5°  | 201.8  | 209.4  | 216.8  | 221.7  | 223.8  | 225.9  | 228.1  | 230.2  |
| 85°    | 167.9  | 175.2  | 182.5  | 187.4  | 189.9  | 192.3  | 194.7  | 197.2  |
| 87.5°  | 142.0  | 149.2  | 156.5  | 161.1  | 163.3  | 165.6  | 167.6  | 169.8  |
| 90°    | 136.8  | 144.7  | 152.5  | 157.0  | 159.7  | 162.5  | 163.6  | 165.6  |
| 92.5°  | 272.2  | 240.7  | 223.6  | 212.2  | 204.9  | 202.5  | 201.8  | 203.7  |
| 95°    | 694.4  | 578.5  | 479.0  | 406.7  | 370.1  | 347.8  | 335.8  | 327.6  |
| 97.5°  | 967.1  | 927.9  | 856.9  | 778.6  | 723.9  | 678.4  | 656.7  | 642.4  |
| 100°   | 1050.1 | 1072.5 | 1040.4 | 986.0  | 918.9  | 872.4  | 850.3  | 845.7  |
| 102.5° | 1040.9 | 1125.8 | 1143.4 | 1123.2 | 1082.8 | 1049.8 | 1026.7 | 1023.5 |
| 105°   | 970.2  | 1113.1 | 1197.5 | 1233.9 | 1237.5 | 1233.1 | 1223.9 | 1221.1 |
| 107.5° | 873.3  | 1025.0 | 1141.2 | 1215.7 | 1256.5 | 1276.3 | 1285.9 | 1289.8 |
| 110°   | 814.7  | 957.0  | 1077.4 | 1168.1 | 1226.2 | 1261.4 | 1277.6 | 1286.6 |





TEST NUMBER: P332657-927

CATALOG NUMBER: SA4XXDIP-C1020D1035U927-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|-------|-------|--------|--------|--------|--------|--------|--------|
| 112.5° | 770.0 | 896.4 | 1010.2 | 1100.8 | 1166.5 | 1208.6 | 1230.5 | 1244.0 |
| 115°   | 723.3 | 825.9 | 923.8  | 1003.3 | 1067.5 | 1116.7 | 1143.7 | 1151.7 |
| 117.5° | 696.6 | 782.1 | 860.0  | 927.8  | 983.1  | 1024.9 | 1052.5 | 1059.3 |
| 120°   | 682.9 | 761.4 | 829.5  | 889.1  | 936.0  | 972.8  | 995.3  | 1006.0 |
| 122.5° | 671.0 | 746.9 | 809.3  | 861.8  | 901.7  | 933.1  | 952.3  | 962.7  |
| 125°   | 652.0 | 724.7 | 783.9  | 830.4  | 863.5  | 887.9  | 904.4  | 910.6  |
| 127.5° | 629.2 | 698.5 | 757.3  | 801.6  | 835.1  | 857.1  | 871.5  | 877.8  |
| 130°   | 612.1 | 679.0 | 737.1  | 782.0  | 815.9  | 837.1  | 851.2  | 857.4  |
| 132.5° | 594.9 | 657.8 | 714.5  | 759.2  | 792.5  | 816.3  | 829.7  | 835.9  |
| 135°   | 569.7 | 625.0 | 677.1  | 719.3  | 752.4  | 776.0  | 790.1  | 796.3  |
| 137.5° | 547.3 | 594.4 | 638.6  | 676.7  | 707.5  | 730.6  | 742.2  | 749.1  |
| 140°   | 534.4 | 574.7 | 613.5  | 649.0  | 677.8  | 696.4  | 708.7  | 716.3  |
| 142.5° | 523.1 | 558.6 | 591.8  | 622.6  | 648.1  | 665.3  | 676.0  | 681.5  |
| 145°   | 507.5 | 535.8 | 561.0  | 584.4  | 605.1  | 619.6  | 628.4  | 633.3  |
| 147.5° | 494.6 | 516.2 | 535.4  | 553.3  | 568.6  | 580.9  | 587.7  | 589.9  |
| 150°   | 488.0 | 506.1 | 522.0  | 536.2  | 548.8  | 559.1  | 563.9  | 564.7  |
| 152.5° | 481.0 | 496.6 | 511.2  | 522.9  | 533.7  | 542.0  | 544.9  | 545.7  |
| 155°   | 470.6 | 483.2 | 495.0  | 504.5  | 512.5  | 518.8  | 521.2  | 521.2  |
| 157.5° | 459.3 | 469.9 | 479.9  | 487.5  | 493.5  | 498.2  | 499.6  | 499.6  |
| 160°   | 452.3 | 461.1 | 469.8  | 476.1  | 480.9  | 485.6  | 486.4  | 486.4  |
| 162.5° | 445.4 | 452.8 | 459.6  | 465.3  | 468.8  | 473.6  | 474.4  | 473.7  |
| 165°   | 435.8 | 440.5 | 446.0  | 450.0  | 453.1  | 456.3  | 455.5  | 454.7  |
| 167.5° | 426.4 | 430.1 | 434.5  | 436.9  | 438.5  | 440.5  | 440.4  | 439.7  |
| 170°   | 420.7 | 423.1 | 426.3  | 428.6  | 430.2  | 431.0  | 430.2  | 430.2  |
| 172.5° | 415.7 | 417.4 | 419.3  | 421.0  | 422.0  | 422.8  | 422.0  | 420.7  |
| 175°   | 408.8 | 409.6 | 411.2  | 411.2  | 411.2  | 412.8  | 411.2  | 409.6  |
| 177.5° | 404.4 | 405.0 | 405.0  | 405.7  | 405.0  | 405.7  | 404.4  | 403.1  |
| 180°   | 402.5 | 402.5 | 402.5  | 402.5  | 402.5  | 402.5  | 402.5  | 402.5  |

(END OF REPORT)