

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: P332906-830

Luminaire Tested: **SA4XXRDIP-C575D590U830-4F0-1E-UDD-F4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332906-830  
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: SA4XXRDIP-C575D590U830-4F0-1E-UDD-F4  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 575 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4205.0 lumens  
Efficiency: N/A  
Efficacy: 128.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: General Diffuse

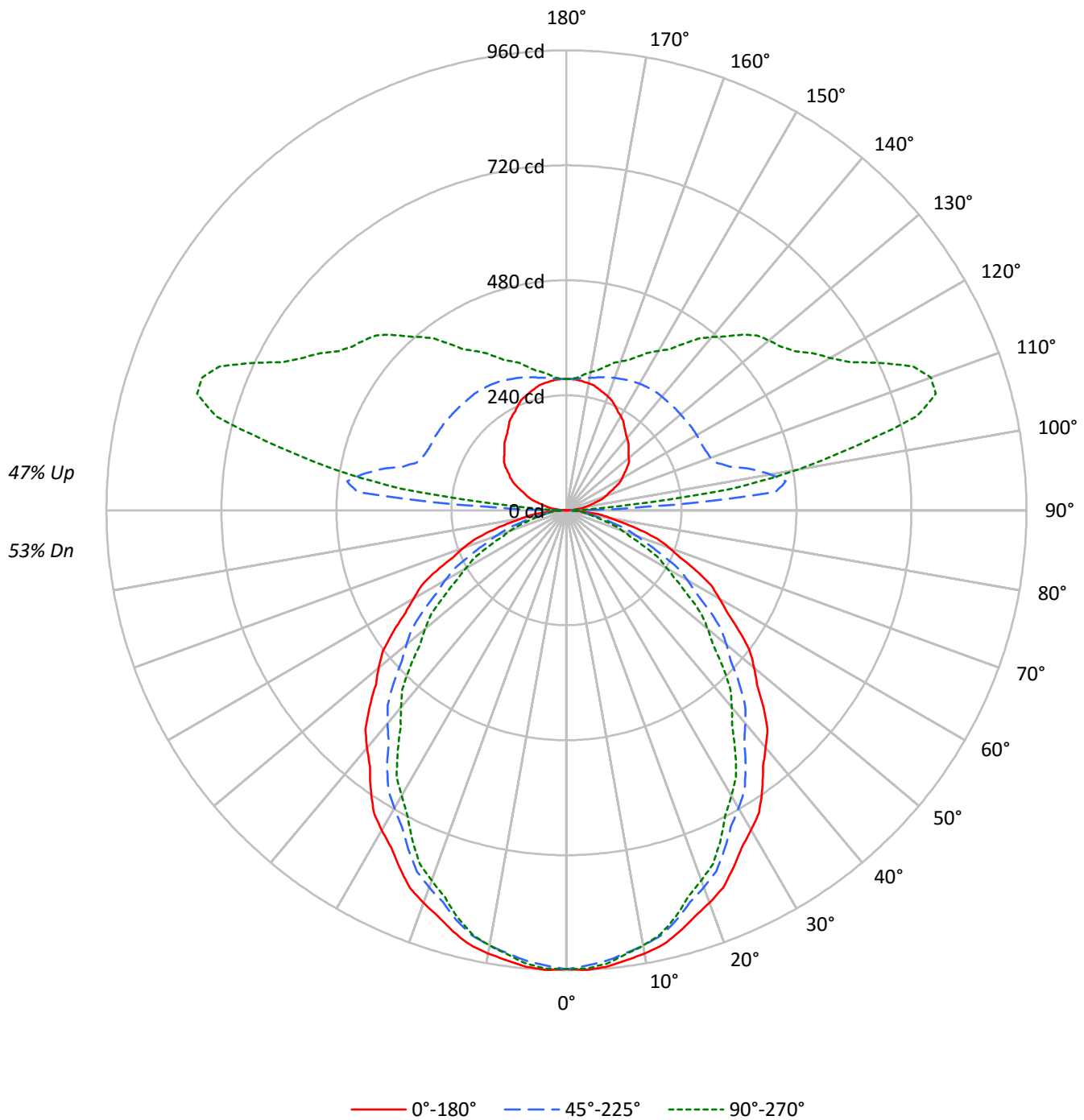
Input Watts (W): 32.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P332906-830

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### Luminous Intensity Polar Plot





TEST NUMBER: P332906-830

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

|     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20 |    |    |    | 20 |    |    |    | 20 |
| RC  | 80  |     |     |     | 70  |     |     |     | 50 |    |    |    | 30 |    |    |    | 10 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |
| 0   | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 85 | 85 | 85 | 71 | 71 | 71 | 59 | 59 | 59 |
| 1   | 99  | 94  | 91  | 87  | 91  | 88  | 84  | 81  | 75 | 72 | 70 | 63 | 61 | 60 | 52 | 51 | 50 |
| 2   | 90  | 83  | 77  | 72  | 83  | 77  | 72  | 67  | 66 | 62 | 59 | 56 | 53 | 50 | 46 | 44 | 43 |
| 3   | 82  | 73  | 66  | 60  | 76  | 68  | 62  | 56  | 58 | 54 | 50 | 49 | 46 | 43 | 41 | 39 | 37 |
| 4   | 75  | 65  | 57  | 51  | 70  | 60  | 53  | 48  | 52 | 47 | 42 | 44 | 40 | 37 | 37 | 34 | 32 |
| 5   | 69  | 58  | 50  | 44  | 64  | 54  | 47  | 41  | 47 | 41 | 37 | 40 | 36 | 32 | 33 | 30 | 28 |
| 6   | 64  | 52  | 44  | 38  | 59  | 49  | 41  | 36  | 42 | 36 | 32 | 36 | 32 | 28 | 30 | 27 | 25 |
| 7   | 59  | 47  | 39  | 34  | 55  | 44  | 37  | 32  | 38 | 33 | 29 | 33 | 28 | 25 | 28 | 24 | 22 |
| 8   | 55  | 43  | 35  | 30  | 51  | 40  | 33  | 28  | 35 | 29 | 25 | 30 | 26 | 23 | 26 | 22 | 20 |
| 9   | 51  | 39  | 32  | 27  | 47  | 37  | 30  | 25  | 32 | 27 | 23 | 28 | 23 | 20 | 24 | 20 | 18 |
| 10  | 48  | 36  | 29  | 24  | 44  | 34  | 27  | 23  | 30 | 24 | 21 | 26 | 21 | 18 | 22 | 19 | 16 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7733 | 7733 | 7733 |
| 5°  | 7750 | 7656 | 7703 |
| 10° | 7702 | 7564 | 7564 |
| 15° | 7614 | 7405 | 7350 |
| 20° | 7491 | 7196 | 7064 |
| 25° | 7337 | 6951 | 6774 |
| 30° | 7185 | 6693 | 6413 |
| 35° | 7019 | 6427 | 6050 |
| 40° | 6817 | 6122 | 5658 |
| 45° | 6632 | 5819 | 5259 |
| 50° | 6420 | 5471 | 4835 |
| 55° | 6194 | 5111 | 4376 |
| 60° | 5945 | 4713 | 3907 |
| 65° | 5717 | 4216 | 3446 |
| 70° | 5384 | 3670 | 2924 |
| 75° | 4966 | 3044 | 2380 |
| 80° | 4328 | 2320 | 2180 |
| 85° | 3668 | 2103 | 1973 |

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 90.0   | 2.1       |
| 10°-20°   | 250.9  | 6.0       |
| 20°-30°   | 362.3  | 8.6       |
| 30°-40°   | 410.7  | 9.8       |
| 40°-50°   | 396.6  | 9.4       |
| 50°-60°   | 329.8  | 7.8       |
| 60°-70°   | 227.7  | 5.4       |
| 70°-80°   | 115.4  | 2.7       |
| 80°-90°   | 31.1   | 0.7       |
| 90°-100°  | 197.7  | 4.7       |
| 100°-110° | 411.4  | 9.8       |
| 110°-120° | 368.5  | 8.8       |
| 120°-130° | 310.0  | 7.4       |
| 130°-140° | 258.4  | 6.1       |
| 140°-150° | 197.4  | 4.7       |
| 150°-160° | 138.8  | 3.3       |
| 160°-170° | 81.6   | 1.9       |
| 170°-180° | 26.6   | 0.6       |
| 0°-30°    | 703.2  | 16.7      |
| 0°-40°    | 1113.9 | 26.5      |
| 0°-60°    | 1840.3 | 43.8      |
| 0°-90°    | 2214.6 | 52.7      |
| 90°-120°  | 977.6  | 23.2      |
| 90°-150°  | 1743.4 | 41.5      |
| 90°-180°  | 1990.0 | 47.3      |
| 0°-180°   | 4205.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 958 | 958   | 958 | 958   | 958 |      |
| 5°   | 956 | 953   | 945 | 952   | 951 | 91   |
| 15°  | 911 | 904   | 886 | 884   | 879 | 257  |
| 25°  | 824 | 810   | 780 | 768   | 760 | 379  |
| 35°  | 712 | 688   | 652 | 628   | 614 | 445  |
| 45°  | 581 | 553   | 510 | 475   | 461 | 448  |
| 55°  | 440 | 410   | 363 | 326   | 311 | 394  |
| 65°  | 299 | 267   | 221 | 190   | 180 | 295  |
| 75°  | 159 | 132   | 98  | 81    | 76  | 168  |
| 85°  | 40  | 26    | 23  | 21    | 21  | 45   |
| 90°  | 1   | 4     | 10  | 11    | 11  | 3    |
| 95°  | 18  | 56    | 438 | 217   | 131 | 20   |
| 105° | 63  | 91    | 353 | 760   | 756 | 67   |
| 115° | 111 | 139   | 314 | 604   | 726 | 110  |
| 125° | 154 | 183   | 313 | 514   | 580 | 137  |
| 135° | 183 | 218   | 310 | 456   | 518 | 142  |
| 145° | 211 | 242   | 309 | 385   | 423 | 133  |
| 155° | 240 | 259   | 300 | 340   | 354 | 111  |
| 165° | 262 | 270   | 288 | 305   | 309 | 74   |
| 175° | 273 | 274   | 276 | 280   | 278 | 26   |
| 180° | 274 | 274   | 274 | 274   | 274 |      |

TEST NUMBER: P332906-830

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 957.9 | 957.9 | 957.9 | 957.9 | 957.9 | 957.9 | 957.9 | 957.9 | 957.9 | 957.9 | 957.9 |
| 2.5°   | 960.3 | 959.7 | 959.2 | 958.7 | 958.2 | 957.2 | 955.7 | 954.3 | 952.8 | 951.4 | 952.8 |
| 5°     | 956.4 | 955.7 | 955.1 | 954.4 | 953.9 | 952.5 | 950.6 | 948.6 | 946.6 | 944.7 | 946.3 |
| 7.5°   | 947.7 | 947.1 | 946.4 | 945.7 | 945.0 | 943.4 | 940.8 | 938.3 | 935.8 | 933.2 | 934.2 |
| 10°    | 939.5 | 938.8 | 937.9 | 937.1 | 936.3 | 934.4 | 931.5 | 928.5 | 925.6 | 922.7 | 923.3 |
| 12.5°  | 929.0 | 928.0 | 927.1 | 926.1 | 925.2 | 923.0 | 919.5 | 916.1 | 912.7 | 909.2 | 909.6 |
| 15°    | 911.0 | 909.5 | 908.0 | 906.5 | 905.0 | 902.3 | 898.2 | 894.2 | 890.0 | 886.0 | 885.7 |
| 17.5°  | 889.1 | 886.9 | 884.9 | 882.7 | 880.6 | 877.1 | 872.2 | 867.3 | 862.4 | 857.5 | 856.7 |
| 20°    | 872.0 | 870.0 | 867.8 | 865.7 | 863.6 | 859.8 | 854.2 | 848.7 | 843.1 | 837.6 | 836.3 |
| 22.5°  | 853.3 | 850.9 | 848.6 | 846.1 | 843.8 | 839.6 | 833.7 | 827.7 | 821.8 | 815.9 | 813.9 |
| 25°    | 823.7 | 820.8 | 817.7 | 814.8 | 811.9 | 807.1 | 800.4 | 793.7 | 787.0 | 780.4 | 777.6 |
| 27.5°  | 792.6 | 788.9 | 785.2 | 781.6 | 777.8 | 772.4 | 765.3 | 758.2 | 751.0 | 743.9 | 740.5 |
| 30°    | 770.8 | 766.8 | 762.7 | 758.7 | 754.6 | 748.7 | 741.0 | 733.4 | 725.7 | 718.0 | 714.0 |
| 32.5°  | 748.0 | 743.4 | 738.8 | 734.1 | 729.6 | 723.3 | 715.4 | 707.5 | 699.6 | 691.6 | 686.9 |
| 35°    | 712.2 | 707.0 | 701.7 | 696.5 | 691.4 | 684.7 | 676.5 | 668.4 | 660.2 | 652.1 | 646.5 |
| 37.5°  | 673.9 | 668.5 | 663.2 | 657.8 | 652.3 | 645.2 | 636.1 | 627.1 | 618.1 | 609.1 | 602.9 |
| 40°    | 646.9 | 641.5 | 636.1 | 630.7 | 625.4 | 618.0 | 608.8 | 599.5 | 590.2 | 580.9 | 574.0 |
| 42.5°  | 621.0 | 615.5 | 609.8 | 604.2 | 598.5 | 590.9 | 581.2 | 571.5 | 561.8 | 552.1 | 545.2 |
| 45°    | 580.9 | 574.9 | 568.8 | 562.8 | 556.8 | 548.8 | 539.0 | 529.3 | 519.5 | 509.7 | 501.7 |
| 47.5°  | 539.4 | 533.2 | 526.9 | 520.7 | 514.4 | 506.2 | 496.1 | 486.0 | 475.8 | 465.6 | 457.3 |
| 50°    | 511.2 | 504.8 | 498.5 | 492.1 | 485.8 | 477.4 | 466.9 | 456.6 | 446.1 | 435.6 | 427.5 |
| 52.5°  | 482.5 | 476.3 | 470.0 | 463.8 | 457.5 | 449.1 | 438.4 | 427.7 | 417.0 | 406.3 | 398.0 |
| 55°    | 440.1 | 433.6 | 427.1 | 420.5 | 414.0 | 405.4 | 394.8 | 384.3 | 373.6 | 363.1 | 354.6 |
| 57.5°  | 398.1 | 391.3 | 384.6 | 377.8 | 371.0 | 362.4 | 351.9 | 341.5 | 331.1 | 320.7 | 312.1 |
| 60°    | 368.2 | 361.7 | 355.2 | 348.6 | 342.1 | 333.7 | 323.2 | 312.7 | 302.4 | 291.9 | 283.4 |
| 62.5°  | 341.2 | 334.4 | 327.6 | 320.8 | 314.1 | 305.4 | 294.6 | 284.0 | 273.2 | 262.6 | 254.8 |
| 65°    | 299.3 | 292.3 | 285.2 | 278.2 | 271.2 | 262.5 | 252.0 | 241.7 | 231.2 | 220.7 | 213.8 |
| 67.5°  | 255.7 | 248.9 | 242.2 | 235.5 | 228.8 | 220.6 | 210.9 | 201.2 | 191.6 | 181.9 | 175.9 |
| 70°    | 228.1 | 221.2 | 214.4 | 207.5 | 200.8 | 192.7 | 183.3 | 174.1 | 164.8 | 155.5 | 150.1 |
| 72.5°  | 198.8 | 192.6 | 186.3 | 180.2 | 174.0 | 166.5 | 157.8 | 149.0 | 140.2 | 131.4 | 126.9 |
| 75°    | 159.2 | 153.2 | 147.1 | 141.1 | 135.1 | 128.2 | 120.6 | 112.8 | 105.2 | 97.6  | 93.8  |
| 77.5°  | 118.9 | 113.9 | 108.8 | 103.6 | 98.5  | 92.8  | 86.6  | 80.5  | 74.3  | 68.1  | 65.9  |
| 80°    | 93.1  | 88.4  | 83.7  | 79.0  | 74.3  | 69.5  | 64.6  | 59.7  | 54.8  | 49.9  | 49.4  |
| 82.5°  | 70.9  | 66.5  | 62.2  | 57.9  | 53.5  | 50.0  | 47.1  | 44.3  | 41.6  | 38.7  | 38.4  |
| 85°    | 39.6  | 36.4  | 33.1  | 29.8  | 26.6  | 24.7  | 24.2  | 23.8  | 23.2  | 22.7  | 22.4  |
| 87.5°  | 13.6  | 12.8  | 12.1  | 11.1  | 10.2  | 9.6   | 10.1  | 10.0  | 10.1  | 10.2  | 9.9   |
| 90°    | 0.6   | 1.6   | 3.2   | 3.8   | 4.3   | 4.3   | 7.5   | 7.5   | 8.6   | 9.7   | 9.1   |
| 92.5°  | 6.1   | 9.0   | 13.9  | 20.5  | 28.4  | 39.6  | 66.9  | 108.6 | 149.3 | 170.5 | 142.0 |
| 95°    | 17.7  | 19.3  | 24.7  | 31.8  | 44.6  | 67.2  | 114.0 | 202.2 | 330.6 | 438.2 | 450.5 |
| 97.5°  | 31.9  | 31.9  | 36.5  | 42.9  | 54.0  | 73.0  | 109.0 | 181.7 | 309.5 | 461.6 | 566.1 |
| 100°   | 40.9  | 40.9  | 44.6  | 51.1  | 61.3  | 78.5  | 110.2 | 171.0 | 280.7 | 432.3 | 570.0 |
| 102.5° | 49.5  | 50.3  | 53.6  | 59.7  | 69.5  | 85.8  | 114.5 | 168.0 | 261.3 | 395.8 | 537.6 |
| 105°   | 62.9  | 64.6  | 67.2  | 73.7  | 83.3  | 99.0  | 124.7 | 169.4 | 244.7 | 352.7 | 479.1 |
| 107.5° | 77.8  | 78.8  | 81.5  | 88.4  | 97.6  | 113.0 | 136.7 | 177.3 | 241.7 | 328.7 | 431.8 |
| 110°   | 87.7  | 88.7  | 91.4  | 97.8  | 107.5 | 122.1 | 145.7 | 183.3 | 242.5 | 320.5 | 408.1 |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 97.1  | 98.2  | 101.3 | 107.4 | 117.0 | 131.5 | 154.3 | 189.8 | 245.1 | 316.6 | 394.7 |
| 115°   | 110.7 | 112.4 | 116.1 | 121.5 | 131.8 | 146.3 | 167.8 | 200.0 | 250.1 | 314.5 | 382.3 |
| 117.5° | 125.0 | 126.5 | 129.8 | 135.7 | 145.2 | 160.3 | 180.8 | 210.5 | 255.2 | 314.0 | 376.7 |
| 120°   | 134.4 | 135.5 | 139.2 | 145.2 | 154.3 | 169.4 | 189.8 | 217.7 | 259.2 | 314.0 | 373.7 |
| 122.5° | 143.0 | 144.1 | 147.9 | 153.4 | 163.3 | 178.0 | 198.4 | 224.6 | 263.1 | 313.6 | 370.2 |
| 125°   | 154.3 | 156.5 | 159.7 | 165.6 | 175.8 | 190.9 | 210.2 | 235.0 | 268.8 | 312.9 | 364.6 |
| 127.5° | 164.3 | 166.1 | 169.9 | 176.6 | 187.3 | 202.5 | 221.2 | 243.9 | 273.4 | 311.7 | 356.9 |
| 130°   | 169.9 | 172.0 | 176.3 | 184.5 | 194.6 | 210.2 | 228.5 | 249.5 | 276.9 | 311.3 | 352.1 |
| 132.5° | 175.5 | 177.2 | 182.9 | 190.5 | 201.5 | 216.2 | 234.5 | 255.1 | 279.9 | 310.9 | 347.9 |
| 135°   | 183.3 | 185.5 | 190.9 | 200.0 | 211.3 | 225.3 | 243.0 | 262.4 | 284.5 | 310.2 | 341.4 |
| 137.5° | 191.2 | 193.2 | 199.2 | 207.8 | 219.6 | 232.9 | 249.5 | 267.6 | 287.1 | 310.1 | 335.8 |
| 140°   | 196.8 | 198.4 | 204.3 | 213.5 | 224.7 | 237.6 | 253.8 | 271.0 | 289.3 | 309.7 | 332.8 |
| 142.5° | 202.8 | 204.4 | 209.9 | 218.6 | 229.5 | 242.0 | 257.7 | 273.5 | 291.0 | 309.7 | 330.3 |
| 145°   | 211.3 | 212.9 | 218.3 | 225.8 | 236.0 | 247.9 | 261.8 | 276.4 | 292.0 | 308.6 | 325.8 |
| 147.5° | 220.8 | 221.4 | 226.1 | 233.8 | 242.4 | 253.1 | 266.2 | 278.8 | 292.5 | 306.7 | 321.9 |
| 150°   | 226.9 | 227.4 | 231.8 | 238.2 | 246.3 | 256.5 | 268.3 | 280.1 | 292.5 | 305.4 | 318.9 |
| 152.5° | 232.5 | 232.6 | 236.9 | 242.9 | 250.2 | 259.5 | 270.0 | 281.0 | 291.6 | 303.2 | 315.4 |
| 155°   | 240.3 | 240.9 | 244.1 | 249.5 | 255.4 | 263.4 | 272.6 | 281.7 | 290.3 | 300.0 | 310.2 |
| 157.5° | 248.0 | 248.0 | 251.0 | 255.1 | 260.3 | 266.6 | 274.5 | 281.7 | 289.0 | 296.7 | 305.0 |
| 160°   | 252.7 | 252.7 | 254.9 | 258.6 | 262.9 | 268.8 | 275.3 | 281.7 | 287.7 | 294.1 | 301.1 |
| 162.5° | 257.0 | 256.6 | 258.3 | 261.6 | 265.5 | 270.1 | 276.2 | 281.7 | 286.3 | 291.5 | 297.7 |
| 165°   | 261.8 | 261.8 | 262.9 | 265.6 | 268.3 | 271.5 | 276.4 | 280.7 | 283.9 | 287.7 | 292.0 |
| 167.5° | 266.6 | 266.2 | 266.6 | 268.7 | 270.2 | 272.7 | 276.3 | 279.4 | 281.3 | 283.8 | 286.8 |
| 170°   | 268.8 | 268.3 | 268.8 | 270.4 | 271.5 | 273.1 | 275.8 | 278.5 | 279.6 | 281.2 | 283.3 |
| 172.5° | 271.0 | 270.4 | 270.5 | 271.7 | 272.4 | 273.5 | 275.4 | 277.7 | 277.9 | 278.6 | 280.3 |
| 175°   | 273.1 | 272.6 | 272.6 | 273.1 | 273.7 | 273.7 | 274.8 | 276.4 | 275.8 | 275.8 | 276.9 |
| 177.5° | 274.1 | 273.7 | 273.2 | 273.7 | 273.7 | 273.7 | 274.1 | 274.9 | 274.1 | 274.1 | 274.6 |
| 180°   | 273.7 | 273.7 | 273.7 | 273.7 | 273.7 | 273.7 | 273.7 | 273.7 | 273.7 | 273.7 | 273.7 |

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**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 957.9 | 957.9 | 957.9 | 957.9 | 957.9 | 957.9 | 957.9 | 957.9 |
| 2.5°   | 954.3 | 955.7 | 957.2 | 957.8 | 957.7 | 957.5 | 957.4 | 957.3 |
| 5°     | 947.9 | 949.6 | 951.2 | 951.9 | 951.5 | 951.2 | 950.8 | 950.6 |
| 7.5°   | 935.3 | 936.3 | 937.5 | 937.6 | 937.2 | 936.6 | 936.1 | 935.6 |
| 10°    | 924.0 | 924.6 | 925.3 | 925.3 | 924.6 | 924.0 | 923.3 | 922.7 |
| 12.5°  | 909.9 | 910.3 | 910.8 | 910.5 | 909.6 | 908.7 | 907.8 | 906.8 |
| 15°    | 885.3 | 885.0 | 884.7 | 884.0 | 882.8 | 881.7 | 880.5 | 879.4 |
| 17.5°  | 855.7 | 854.8 | 853.8 | 852.5 | 850.8 | 849.1 | 847.3 | 845.6 |
| 20°    | 835.0 | 833.7 | 832.4 | 830.7 | 828.6 | 826.4 | 824.3 | 822.2 |
| 22.5°  | 812.0 | 810.0 | 808.0 | 806.3 | 804.5 | 802.8 | 801.1 | 799.3 |
| 25°    | 774.9 | 772.0 | 769.3 | 767.1 | 765.4 | 763.8 | 762.2 | 760.5 |
| 27.5°  | 737.0 | 733.6 | 730.2 | 727.3 | 724.9 | 722.6 | 720.3 | 717.9 |
| 30°    | 709.9 | 705.8 | 701.7 | 698.4 | 695.8 | 693.1 | 690.6 | 688.0 |
| 32.5°  | 682.2 | 677.5 | 672.7 | 669.1 | 666.7 | 664.2 | 661.7 | 659.2 |
| 35°    | 640.9 | 635.4 | 629.9 | 625.7 | 622.7 | 619.7 | 616.8 | 613.9 |
| 37.5°  | 596.6 | 590.5 | 584.3 | 579.8 | 576.7 | 573.8 | 570.9 | 568.0 |
| 40°    | 567.2 | 560.3 | 553.5 | 548.7 | 545.6 | 542.7 | 539.8 | 536.9 |
| 42.5°  | 538.2 | 531.2 | 524.2 | 519.2 | 516.1 | 513.1 | 510.0 | 507.0 |
| 45°    | 493.8 | 485.8 | 477.8 | 472.3 | 469.4 | 466.5 | 463.5 | 460.6 |
| 47.5°  | 449.0 | 440.7 | 432.4 | 426.7 | 423.5 | 420.3 | 417.1 | 413.8 |
| 50°    | 419.3 | 411.2 | 403.0 | 397.5 | 394.4 | 391.2 | 388.1 | 385.0 |
| 52.5°  | 389.7 | 381.4 | 373.2 | 367.5 | 364.2 | 361.0 | 357.8 | 354.6 |
| 55°    | 346.1 | 337.6 | 329.1 | 323.4 | 320.3 | 317.2 | 314.1 | 310.9 |
| 57.5°  | 303.4 | 294.8 | 286.3 | 280.8 | 278.4 | 276.1 | 273.7 | 271.4 |
| 60°    | 274.9 | 266.5 | 258.0 | 252.5 | 249.9 | 247.2 | 244.7 | 242.0 |
| 62.5°  | 246.9 | 239.1 | 231.3 | 226.3 | 224.2 | 222.2 | 220.1 | 218.0 |
| 65°    | 206.8 | 199.7 | 192.7 | 188.2 | 186.3 | 184.4 | 182.4 | 180.4 |
| 67.5°  | 169.8 | 163.8 | 157.8 | 153.7 | 151.6 | 149.4 | 147.2 | 145.1 |
| 70°    | 144.8 | 139.4 | 133.9 | 130.4 | 128.8 | 127.2 | 125.5 | 123.9 |
| 72.5°  | 122.2 | 117.6 | 113.0 | 110.0 | 108.5 | 107.0 | 105.5 | 104.0 |
| 75°    | 90.0  | 86.3  | 82.6  | 80.2  | 79.2  | 78.2  | 77.3  | 76.3  |
| 77.5°  | 63.7  | 61.5  | 59.3  | 58.1  | 57.8  | 57.5  | 57.2  | 56.9  |
| 80°    | 48.9  | 48.4  | 47.9  | 47.6  | 47.4  | 47.2  | 47.1  | 46.9  |
| 82.5°  | 38.0  | 37.6  | 37.3  | 37.0  | 36.9  | 36.7  | 36.6  | 36.4  |
| 85°    | 22.1  | 21.8  | 21.4  | 21.3  | 21.3  | 21.3  | 21.3  | 21.3  |
| 87.5°  | 9.9   | 9.9   | 9.8   | 9.8   | 10.1  | 10.3  | 10.4  | 10.5  |
| 90°    | 9.7   | 10.2  | 10.7  | 10.7  | 11.3  | 11.8  | 11.3  | 11.3  |
| 92.5°  | 105.6 | 79.5  | 63.2  | 52.5  | 46.1  | 43.3  | 41.4  | 41.4  |
| 95°    | 398.4 | 315.1 | 243.0 | 190.9 | 164.6 | 147.9 | 138.2 | 131.2 |
| 97.5°  | 588.6 | 557.7 | 505.1 | 448.9 | 410.4 | 378.0 | 361.8 | 350.6 |
| 100°   | 648.5 | 659.2 | 632.8 | 593.0 | 546.3 | 513.5 | 497.4 | 493.0 |
| 102.5° | 645.5 | 698.8 | 706.4 | 689.8 | 661.1 | 637.3 | 620.4 | 616.9 |
| 105°   | 602.2 | 695.2 | 748.5 | 770.5 | 771.6 | 767.2 | 759.7 | 756.5 |
| 107.5° | 540.8 | 639.8 | 714.8 | 762.7 | 789.3 | 801.5 | 806.9 | 808.3 |
| 110°   | 503.8 | 596.8 | 674.8 | 734.0 | 772.1 | 794.7 | 804.4 | 809.2 |

TEST NUMBER: P332906-830

CATALOG NUMBER: SA4XXRDIP-C575D590U830-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 476.7 | 558.9 | 632.6 | 691.7 | 735.1 | 762.4 | 776.0 | 783.8 |
| 115°   | 449.5 | 515.7 | 578.5 | 630.2 | 672.6 | 704.9 | 722.1 | 726.4 |
| 117.5° | 436.1 | 490.9 | 540.4 | 584.1 | 620.4 | 647.4 | 664.9 | 668.3 |
| 120°   | 430.2 | 480.1 | 523.1 | 561.3 | 592.0 | 615.7 | 629.6 | 635.6 |
| 122.5° | 425.0 | 473.3 | 512.4 | 545.8 | 571.7 | 592.0 | 603.8 | 609.7 |
| 125°   | 416.1 | 462.4 | 499.5 | 529.0 | 550.5 | 566.2 | 576.4 | 579.6 |
| 127.5° | 405.4 | 449.6 | 486.6 | 514.6 | 536.3 | 550.2 | 558.7 | 561.9 |
| 130°   | 396.8 | 439.3 | 475.8 | 504.4 | 526.4 | 539.8 | 548.5 | 551.7 |
| 132.5° | 387.8 | 427.6 | 463.4 | 491.8 | 513.5 | 528.7 | 536.8 | 540.1 |
| 135°   | 375.3 | 410.3 | 443.0 | 470.0 | 491.4 | 506.5 | 515.1 | 518.3 |
| 137.5° | 364.0 | 393.6 | 421.2 | 445.5 | 465.6 | 480.5 | 487.6 | 491.4 |
| 140°   | 357.5 | 382.9 | 407.0 | 429.6 | 448.5 | 460.2 | 467.8 | 472.1 |
| 142.5° | 351.6 | 373.8 | 394.5 | 414.2 | 430.7 | 441.8 | 448.5 | 451.4 |
| 145°   | 343.0 | 361.3 | 377.5 | 392.5 | 406.0 | 415.1 | 420.5 | 423.1 |
| 147.5° | 336.0 | 350.5 | 363.4 | 375.3 | 385.2 | 393.0 | 397.1 | 398.1 |
| 150°   | 331.8 | 344.1 | 354.9 | 364.6 | 373.2 | 380.1 | 383.3 | 383.9 |
| 152.5° | 327.0 | 337.6 | 347.5 | 355.5 | 362.8 | 368.5 | 370.4 | 371.0 |
| 155°   | 319.9 | 328.5 | 336.6 | 343.0 | 348.5 | 352.7 | 354.3 | 354.3 |
| 157.5° | 312.3 | 319.5 | 326.2 | 331.4 | 335.5 | 338.7 | 339.7 | 339.7 |
| 160°   | 307.6 | 313.5 | 319.3 | 323.7 | 326.9 | 330.2 | 330.6 | 330.6 |
| 162.5° | 302.8 | 307.8 | 312.5 | 316.4 | 318.8 | 322.0 | 322.5 | 322.1 |
| 165°   | 296.2 | 299.4 | 303.2 | 305.9 | 308.1 | 310.2 | 309.7 | 309.2 |
| 167.5° | 289.9 | 292.4 | 295.4 | 297.0 | 298.1 | 299.4 | 299.4 | 299.0 |
| 170°   | 286.1 | 287.7 | 289.8 | 291.4 | 292.5 | 293.0 | 292.5 | 292.5 |
| 172.5° | 282.6 | 283.8 | 285.1 | 286.3 | 286.9 | 287.5 | 286.9 | 286.1 |
| 175°   | 278.0 | 278.5 | 279.6 | 279.6 | 279.6 | 280.7 | 279.6 | 278.5 |
| 177.5° | 274.9 | 275.4 | 275.4 | 275.8 | 275.4 | 275.8 | 274.9 | 274.1 |
| 180°   | 273.7 | 273.7 | 273.7 | 273.7 | 273.7 | 273.7 | 273.7 | 273.7 |

(END OF REPORT)