

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: P332904-840

Luminaire Tested: **SA4XXRDIP-C575D590U840-4F0-1E-UDD-F**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332904-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C575D590U840-4F0-1E-UDD-F
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

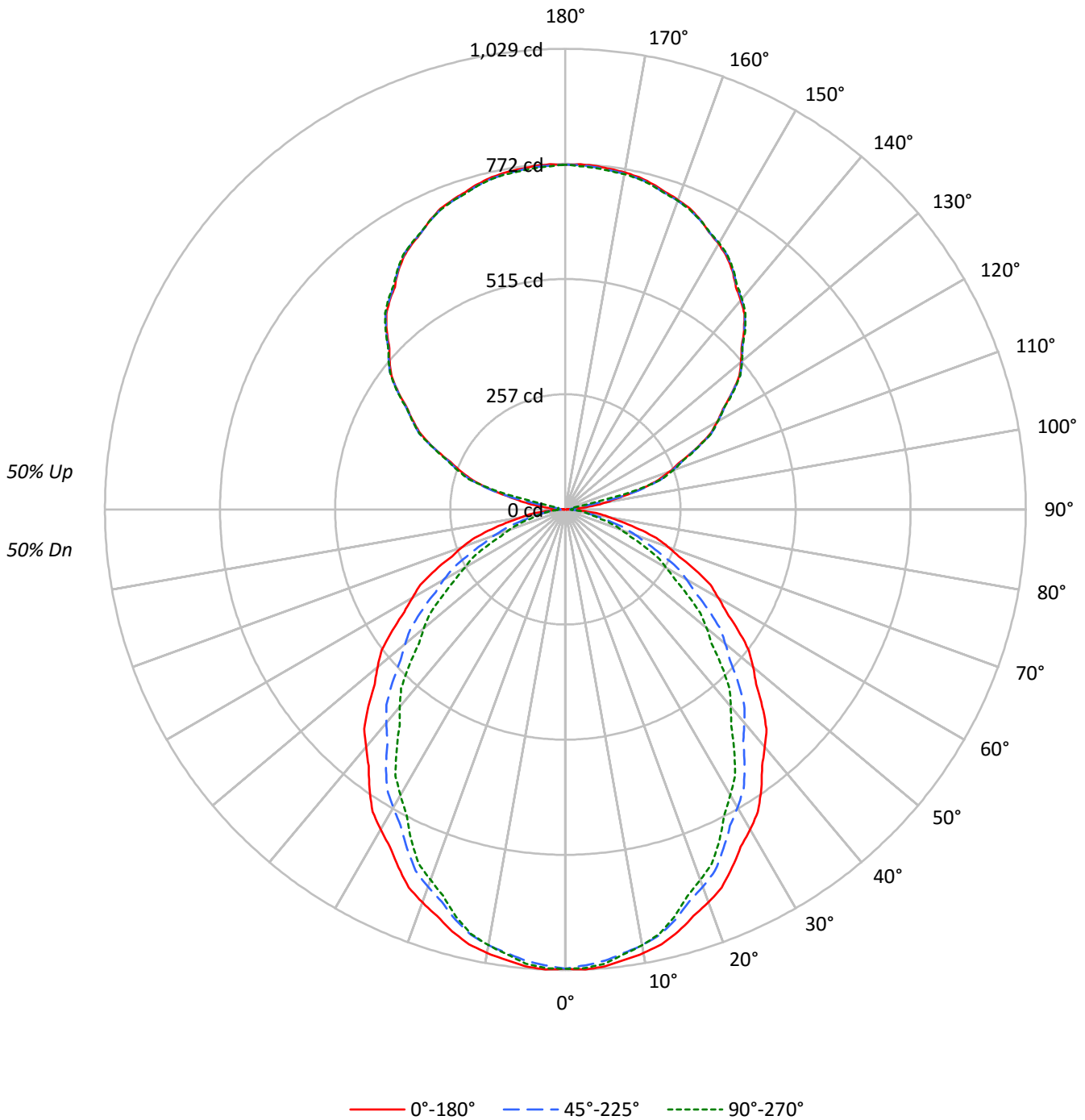
Lumens per Lamp: N/A
Luminaire Lumens: 4755.8 lumens
Efficiency: N/A
Efficacy: 145.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: General Diffuse

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: P332904-840
CATALOG NUMBER: SA4XXRDIP-C575D590U840-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P332904-840

CATALOG NUMBER: SA4XXRDIP-C575D590U840-4F0-1E-UDD-F

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|----|
| RF | 20 | | | | | | | | | 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 | 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 | 56 | 56 | 56 | 50 | 50 | 43 | 43 | 36 | 36 | 31 | 31 | 27 | 27 | 23 | 23 | | | | | | | | | | | | | | | | |
| | 1 | 98 | 94 | 90 | 87 | 90 | 87 | 83 | 81 | 73 | 71 | 69 | 61 | 60 | 58 | 50 | 49 | 48 | 43 | 43 | 36 | 36 | 31 | 31 | 27 | 27 | 23 | 23 | 18 | 18 | | | | | | | | | | | | | | | | |
| | 2 | 89 | 82 | 76 | 71 | 82 | 76 | 71 | 66 | 65 | 61 | 57 | 54 | 51 | 49 | 44 | 42 | 41 | 36 | 36 | 31 | 31 | 27 | 27 | 23 | 23 | 18 | 18 | 14 | 14 | | | | | | | | | | | | | | | | |
| | 3 | 82 | 72 | 65 | 60 | 75 | 67 | 61 | 56 | 57 | 52 | 49 | 48 | 45 | 42 | 39 | 37 | 35 | 31 | 31 | 27 | 27 | 23 | 23 | 18 | 18 | 14 | 14 | 10 | 10 | | | | | | | | | | | | | | | | |
| | 4 | 75 | 64 | 57 | 51 | 69 | 60 | 53 | 48 | 51 | 46 | 42 | 43 | 39 | 36 | 35 | 33 | 30 | 27 | 27 | 23 | 23 | 18 | 18 | 14 | 14 | 10 | 10 | 6 | 6 | | | | | | | | | | | | | | | | |
| | 5 | 69 | 57 | 49 | 43 | 63 | 53 | 46 | 41 | 46 | 40 | 36 | 39 | 34 | 31 | 32 | 29 | 27 | 23 | 23 | 18 | 18 | 14 | 14 | 10 | 10 | 6 | 6 | 2 | 2 | | | | | | | | | | | | | | | | |
| | 6 | 63 | 52 | 44 | 38 | 58 | 48 | 41 | 36 | 41 | 36 | 32 | 35 | 31 | 27 | 29 | 26 | 23 | 21 | 21 | 18 | 18 | 14 | 14 | 10 | 10 | 6 | 6 | 2 | 2 | | | | | | | | | | | | | | | | |
| | 7 | 59 | 47 | 39 | 33 | 54 | 43 | 36 | 31 | 37 | 32 | 28 | 32 | 28 | 24 | 27 | 23 | 21 | 18 | 18 | 14 | 14 | 10 | 10 | 6 | 6 | 2 | 2 | 0 | 0 | | | | | | | | | | | | | | | | |
| | 8 | 55 | 42 | 35 | 29 | 50 | 40 | 33 | 28 | 34 | 29 | 25 | 29 | 25 | 22 | 24 | 21 | 19 | 16 | 16 | 14 | 14 | 10 | 10 | 6 | 6 | 2 | 2 | 0 | 0 | | | | | | | | | | | | | | | | |
| | 9 | 51 | 39 | 31 | 26 | 47 | 36 | 30 | 25 | 31 | 26 | 22 | 27 | 23 | 20 | 23 | 19 | 17 | 15 | 15 | 14 | 14 | 10 | 10 | 6 | 6 | 2 | 2 | 0 | 0 | | | | | | | | | | | | | | | | |
| | 10 | 47 | 36 | 28 | 24 | 44 | 33 | 27 | 22 | 29 | 24 | 20 | 25 | 21 | 18 | 21 | 18 | 16 | 14 | 14 | 10 | 10 | 6 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8285 | 8285 | 8285 |
| 5° | 8304 | 8203 | 8253 |
| 10° | 8252 | 8104 | 8104 |
| 15° | 8157 | 7934 | 7875 |
| 20° | 8027 | 7710 | 7568 |
| 25° | 7861 | 7448 | 7259 |
| 30° | 7699 | 7171 | 6871 |
| 35° | 7521 | 6885 | 6482 |
| 40° | 7304 | 6559 | 6062 |
| 45° | 7106 | 6235 | 5634 |
| 50° | 6880 | 5863 | 5181 |
| 55° | 6636 | 5475 | 4690 |
| 60° | 6370 | 5050 | 4187 |
| 65° | 6124 | 4518 | 3692 |
| 70° | 5769 | 3932 | 3135 |
| 75° | 5321 | 3260 | 2548 |
| 80° | 4640 | 2483 | 2338 |
| 85° | 3927 | 2251 | 2112 |



TEST NUMBER: P332904-840

CATALOG NUMBER: SA4XXRDIP-C575D590U840-4F0-1E-UDD-F

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 96.4 | 2.0 |
| 10°-20° | 268.8 | 5.7 |
| 20°-30° | 388.2 | 8.2 |
| 30°-40° | 440.0 | 9.3 |
| 40°-50° | 424.9 | 8.9 |
| 50°-60° | 353.4 | 7.4 |
| 60°-70° | 244.0 | 5.1 |
| 70°-80° | 123.7 | 2.6 |
| 80°-90° | 34.0 | 0.7 |
| 90°-100° | 26.3 | 0.6 |
| 100°-110° | 168.0 | 3.5 |
| 110°-120° | 321.3 | 6.8 |
| 120°-130° | 407.9 | 8.6 |
| 130°-140° | 436.4 | 9.2 |
| 140°-150° | 408.1 | 8.6 |
| 150°-160° | 329.1 | 6.9 |
| 160°-170° | 212.2 | 4.5 |
| 170°-180° | 73.2 | 1.5 |
| 0°-30° | 753.5 | 15.8 |
| 0°-40° | 1193.5 | 25.1 |
| 0°-60° | 1971.8 | 41.5 |
| 0°-90° | 2373.4 | 49.9 |
| 90°-120° | 515.6 | 10.8 |
| 90°-150° | 1767.9 | 37.2 |
| 90°-180° | 2382.0 | 50.1 |
| 0°-180° | 4755.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1026 | 1026 | 1026 | 1026 | 1026 | |
| 5° | 1025 | 1021 | 1012 | 1020 | 1018 | 97 |
| 15° | 976 | 968 | 949 | 948 | 942 | 275 |
| 25° | 882 | 867 | 836 | 823 | 815 | 406 |
| 35° | 763 | 737 | 699 | 673 | 658 | 477 |
| 45° | 622 | 592 | 546 | 509 | 494 | 480 |
| 55° | 472 | 439 | 389 | 350 | 333 | 422 |
| 65° | 321 | 286 | 236 | 204 | 193 | 317 |
| 75° | 171 | 141 | 104 | 87 | 82 | 180 |
| 85° | 42 | 28 | 24 | 23 | 23 | 48 |
| 90° | 2 | 8 | 13 | 16 | 17 | 3 |
| 95° | 32 | 13 | 13 | 16 | 17 | 41 |
| 105° | 173 | 177 | 180 | 183 | 164 | 181 |
| 115° | 324 | 325 | 325 | 326 | 326 | 318 |
| 125° | 455 | 457 | 456 | 458 | 459 | 406 |
| 135° | 564 | 564 | 566 | 567 | 569 | 435 |
| 145° | 651 | 653 | 653 | 653 | 654 | 407 |
| 155° | 714 | 714 | 713 | 715 | 713 | 329 |
| 165° | 753 | 750 | 750 | 754 | 749 | 213 |
| 175° | 770 | 767 | 767 | 772 | 766 | 73 |
| 180° | 770 | 770 | 770 | 770 | 770 | |



TEST NUMBER: P332904-840

CATALOG NUMBER: SA4XXRDIP-C575D590U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1026.3 | 1026.3 | 1026.3 | 1026.3 | 1026.3 | 1026.3 | 1026.3 | 1026.3 | 1026.3 | 1026.3 | 1026.3 |
| 2.5° | 1028.9 | 1028.2 | 1027.7 | 1027.1 | 1026.6 | 1025.5 | 1024.0 | 1022.5 | 1020.9 | 1019.4 | 1020.9 |
| 5° | 1024.7 | 1024.0 | 1023.3 | 1022.6 | 1022.0 | 1020.6 | 1018.4 | 1016.3 | 1014.2 | 1012.2 | 1013.9 |
| 7.5° | 1015.4 | 1014.7 | 1014.0 | 1013.3 | 1012.5 | 1010.8 | 1008.0 | 1005.3 | 1002.6 | 999.9 | 1001.0 |
| 10° | 1006.6 | 1005.8 | 1004.9 | 1004.0 | 1003.2 | 1001.2 | 998.0 | 994.8 | 991.7 | 988.6 | 989.3 |
| 12.5° | 995.3 | 994.3 | 993.3 | 992.3 | 991.3 | 989.0 | 985.2 | 981.5 | 977.9 | 974.1 | 974.5 |
| 15° | 976.0 | 974.4 | 972.9 | 971.3 | 969.7 | 966.7 | 962.4 | 958.1 | 953.6 | 949.3 | 949.0 |
| 17.5° | 952.6 | 950.3 | 948.1 | 945.7 | 943.5 | 939.8 | 934.5 | 929.3 | 924.0 | 918.8 | 917.9 |
| 20° | 934.3 | 932.1 | 929.8 | 927.6 | 925.2 | 921.2 | 915.2 | 909.3 | 903.3 | 897.5 | 896.1 |
| 22.5° | 914.2 | 911.7 | 909.2 | 906.6 | 904.0 | 899.6 | 893.2 | 886.9 | 880.5 | 874.1 | 872.0 |
| 25° | 882.5 | 879.4 | 876.2 | 873.0 | 869.9 | 864.7 | 857.6 | 850.4 | 843.2 | 836.2 | 833.1 |
| 27.5° | 849.2 | 845.3 | 841.3 | 837.4 | 833.3 | 827.6 | 819.9 | 812.3 | 804.7 | 797.0 | 793.3 |
| 30° | 825.9 | 821.5 | 817.2 | 812.8 | 808.5 | 802.1 | 794.0 | 785.8 | 777.5 | 769.3 | 765.0 |
| 32.5° | 801.4 | 796.5 | 791.5 | 786.6 | 781.7 | 775.0 | 766.5 | 758.0 | 749.5 | 741.0 | 736.0 |
| 35° | 763.1 | 757.5 | 751.8 | 746.3 | 740.7 | 733.6 | 724.8 | 716.1 | 707.3 | 698.6 | 692.7 |
| 37.5° | 722.1 | 716.3 | 710.5 | 704.8 | 698.9 | 691.3 | 681.6 | 671.9 | 662.3 | 652.6 | 645.9 |
| 40° | 693.1 | 687.3 | 681.6 | 675.8 | 670.0 | 662.2 | 652.3 | 642.3 | 632.4 | 622.4 | 615.0 |
| 42.5° | 665.4 | 659.4 | 653.4 | 647.3 | 641.3 | 633.1 | 622.7 | 612.3 | 602.0 | 591.6 | 584.1 |
| 45° | 622.4 | 615.9 | 609.5 | 603.0 | 596.5 | 588.0 | 577.5 | 567.1 | 556.6 | 546.1 | 537.6 |
| 47.5° | 577.9 | 571.3 | 564.5 | 557.8 | 551.2 | 542.4 | 531.5 | 520.7 | 509.8 | 498.9 | 490.0 |
| 50° | 547.8 | 540.9 | 534.1 | 527.3 | 520.5 | 511.5 | 500.3 | 489.2 | 478.0 | 466.8 | 458.1 |
| 52.5° | 516.9 | 510.3 | 503.6 | 497.0 | 490.2 | 481.2 | 469.7 | 458.3 | 446.8 | 435.4 | 426.5 |
| 55° | 471.5 | 464.5 | 457.6 | 450.5 | 443.5 | 434.3 | 423.0 | 411.7 | 400.3 | 389.0 | 379.9 |
| 57.5° | 426.6 | 419.3 | 412.0 | 404.8 | 397.5 | 388.3 | 377.1 | 365.9 | 354.8 | 343.6 | 334.4 |
| 60° | 394.5 | 387.5 | 380.5 | 373.5 | 366.6 | 357.5 | 346.3 | 335.1 | 324.0 | 312.8 | 303.7 |
| 62.5° | 365.6 | 358.3 | 351.0 | 343.8 | 336.5 | 327.2 | 315.7 | 304.3 | 292.8 | 281.3 | 273.0 |
| 65° | 320.6 | 313.2 | 305.6 | 298.1 | 290.5 | 281.2 | 270.0 | 258.9 | 247.7 | 236.5 | 229.0 |
| 67.5° | 274.0 | 266.7 | 259.5 | 252.4 | 245.2 | 236.4 | 226.0 | 215.6 | 205.3 | 194.9 | 188.4 |
| 70° | 244.4 | 237.0 | 229.7 | 222.4 | 215.1 | 206.4 | 196.4 | 186.5 | 176.5 | 166.6 | 160.9 |
| 72.5° | 213.0 | 206.3 | 199.7 | 193.1 | 186.4 | 178.4 | 169.1 | 159.7 | 150.2 | 140.8 | 135.9 |
| 75° | 170.6 | 164.1 | 157.6 | 151.2 | 144.7 | 137.3 | 129.2 | 120.9 | 112.7 | 104.5 | 100.5 |
| 77.5° | 127.4 | 122.0 | 116.5 | 111.0 | 105.5 | 99.5 | 92.8 | 86.2 | 79.6 | 72.9 | 70.6 |
| 80° | 99.8 | 94.7 | 89.7 | 84.6 | 79.6 | 74.4 | 69.2 | 63.9 | 58.7 | 53.4 | 52.9 |
| 82.5° | 75.9 | 71.3 | 66.7 | 62.0 | 57.4 | 53.5 | 50.5 | 47.5 | 44.5 | 41.5 | 41.1 |
| 85° | 42.4 | 39.0 | 35.4 | 31.9 | 28.5 | 26.5 | 26.0 | 25.4 | 24.8 | 24.3 | 24.0 |
| 87.5° | 14.8 | 13.9 | 13.1 | 12.3 | 11.4 | 11.1 | 11.1 | 11.2 | 11.3 | 11.3 | 11.3 |
| 90° | 1.7 | 3.1 | 4.5 | 6.0 | 7.4 | 8.6 | 9.6 | 10.6 | 11.6 | 12.6 | 13.4 |
| 92.5° | 7.3 | 7.4 | 7.4 | 7.5 | 7.6 | 8.1 | 9.2 | 10.2 | 11.2 | 12.2 | 13.0 |
| 95° | 31.7 | 27.4 | 23.0 | 18.6 | 14.2 | 12.1 | 12.3 | 12.4 | 12.5 | 12.6 | 13.4 |
| 97.5° | 67.3 | 70.0 | 72.7 | 75.4 | 78.2 | 72.3 | 58.1 | 43.8 | 29.5 | 15.2 | 15.2 |
| 100° | 94.4 | 96.7 | 99.1 | 101.4 | 103.7 | 96.0 | 78.4 | 60.7 | 43.0 | 25.3 | 23.1 |
| 102.5° | 124.9 | 126.5 | 128.3 | 130.0 | 131.7 | 131.4 | 129.1 | 126.7 | 124.4 | 122.1 | 98.7 |
| 105° | 173.4 | 174.2 | 174.9 | 175.7 | 176.4 | 177.1 | 177.8 | 178.4 | 179.0 | 179.8 | 180.9 |
| 107.5° | 218.4 | 218.8 | 219.2 | 219.5 | 219.9 | 220.6 | 221.5 | 222.4 | 223.2 | 224.1 | 224.7 |
| 110° | 248.8 | 249.2 | 249.6 | 250.0 | 250.3 | 251.0 | 251.8 | 252.5 | 253.3 | 254.1 | 254.3 |



TEST NUMBER: P332904-840

CATALOG NUMBER: SA4XXRDIP-C575D590U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 278.3 | 279.0 | 279.7 | 280.4 | 281.1 | 281.7 | 282.0 | 282.4 | 282.8 | 283.1 | 283.1 |
| 115° | 323.8 | 324.2 | 324.5 | 324.9 | 325.3 | 325.4 | 325.3 | 325.2 | 325.0 | 324.9 | 325.2 |
| 117.5° | 364.7 | 365.2 | 365.7 | 366.2 | 366.7 | 367.1 | 367.4 | 367.7 | 367.9 | 368.2 | 368.2 |
| 120° | 392.3 | 392.8 | 393.3 | 393.8 | 394.4 | 394.6 | 394.5 | 394.3 | 394.2 | 394.0 | 394.3 |
| 122.5° | 418.1 | 418.4 | 418.7 | 419.0 | 419.3 | 419.6 | 419.8 | 419.9 | 420.1 | 420.3 | 420.4 |
| 125° | 455.0 | 455.6 | 456.2 | 456.7 | 457.2 | 457.3 | 457.0 | 456.8 | 456.5 | 456.3 | 456.7 |
| 127.5° | 490.1 | 490.2 | 490.4 | 490.5 | 490.6 | 491.0 | 491.6 | 492.1 | 492.7 | 493.3 | 493.2 |
| 130° | 512.7 | 512.8 | 512.9 | 513.1 | 513.2 | 513.4 | 513.8 | 514.2 | 514.6 | 515.0 | 515.1 |
| 132.5° | 533.4 | 533.6 | 533.9 | 534.1 | 534.3 | 534.7 | 535.2 | 535.6 | 536.1 | 536.6 | 536.7 |
| 135° | 564.5 | 564.4 | 564.3 | 564.1 | 564.0 | 564.2 | 564.7 | 565.2 | 565.7 | 566.2 | 566.5 |
| 137.5° | 592.1 | 592.1 | 592.2 | 592.2 | 592.3 | 592.6 | 593.1 | 593.7 | 594.3 | 594.8 | 595.1 |
| 140° | 610.1 | 610.3 | 610.6 | 610.8 | 611.1 | 611.3 | 611.6 | 611.9 | 612.1 | 612.4 | 612.7 |
| 142.5° | 626.2 | 626.6 | 627.1 | 627.5 | 628.0 | 628.3 | 628.4 | 628.6 | 628.7 | 628.9 | 629.2 |
| 145° | 651.0 | 651.4 | 651.7 | 652.1 | 652.5 | 652.7 | 652.7 | 652.7 | 652.7 | 652.7 | 652.8 |
| 147.5° | 670.7 | 671.4 | 672.1 | 672.8 | 673.5 | 673.8 | 673.7 | 673.6 | 673.4 | 673.3 | 673.4 |
| 150° | 684.9 | 685.4 | 686.0 | 686.5 | 687.0 | 687.2 | 687.0 | 686.9 | 686.8 | 686.6 | 686.6 |
| 152.5° | 696.9 | 697.3 | 697.7 | 698.1 | 698.5 | 698.6 | 698.4 | 698.2 | 697.9 | 697.7 | 697.9 |
| 155° | 713.8 | 713.9 | 714.0 | 714.1 | 714.3 | 714.1 | 713.8 | 713.4 | 713.0 | 712.6 | 713.1 |
| 157.5° | 727.9 | 727.8 | 727.7 | 727.7 | 727.6 | 727.3 | 726.9 | 726.5 | 726.0 | 725.6 | 726.3 |
| 160° | 736.2 | 735.8 | 735.4 | 735.1 | 734.7 | 734.4 | 734.3 | 734.2 | 734.0 | 733.9 | 734.7 |
| 162.5° | 743.6 | 743.1 | 742.6 | 742.1 | 741.6 | 741.3 | 741.1 | 741.0 | 740.9 | 740.8 | 741.5 |
| 165° | 752.9 | 752.2 | 751.6 | 750.9 | 750.3 | 750.0 | 750.0 | 750.0 | 750.0 | 750.0 | 751.0 |
| 167.5° | 760.2 | 759.6 | 758.9 | 758.3 | 757.6 | 757.2 | 757.2 | 757.1 | 757.0 | 756.9 | 758.1 |
| 170° | 764.5 | 763.7 | 762.9 | 762.1 | 761.3 | 761.0 | 761.1 | 761.2 | 761.4 | 761.5 | 762.5 |
| 172.5° | 767.2 | 766.4 | 765.7 | 764.9 | 764.2 | 763.8 | 764.0 | 764.1 | 764.2 | 764.3 | 765.4 |
| 175° | 770.2 | 769.4 | 768.6 | 767.9 | 767.1 | 766.8 | 766.9 | 767.1 | 767.2 | 767.3 | 768.4 |
| 177.5° | 771.5 | 770.8 | 770.1 | 769.4 | 768.7 | 768.4 | 768.6 | 768.8 | 769.0 | 769.2 | 770.1 |
| 180° | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 |



TEST NUMBER: P332904-840

CATALOG NUMBER: SA4XXRDIP-C575D590U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1026.3 | 1026.3 | 1026.3 | 1026.3 | 1026.3 | 1026.3 | 1026.3 | 1026.3 |
| 2.5° | 1022.5 | 1024.0 | 1025.5 | 1026.2 | 1026.1 | 1025.9 | 1025.8 | 1025.7 |
| 5° | 1015.6 | 1017.4 | 1019.2 | 1019.9 | 1019.5 | 1019.2 | 1018.8 | 1018.4 |
| 7.5° | 1002.1 | 1003.2 | 1004.4 | 1004.6 | 1004.1 | 1003.5 | 1003.0 | 1002.4 |
| 10° | 990.0 | 990.7 | 991.4 | 991.4 | 990.7 | 990.0 | 989.3 | 988.6 |
| 12.5° | 974.9 | 975.3 | 975.8 | 975.5 | 974.5 | 973.6 | 972.6 | 971.6 |
| 15° | 948.6 | 948.3 | 947.9 | 947.2 | 945.8 | 944.6 | 943.4 | 942.2 |
| 17.5° | 916.9 | 915.8 | 914.8 | 913.4 | 911.6 | 909.8 | 907.9 | 906.1 |
| 20° | 894.6 | 893.2 | 891.8 | 890.0 | 887.8 | 885.4 | 883.2 | 880.9 |
| 22.5° | 870.0 | 867.9 | 865.8 | 863.8 | 861.9 | 860.1 | 858.3 | 856.4 |
| 25° | 830.2 | 827.2 | 824.3 | 821.9 | 820.1 | 818.4 | 816.7 | 814.9 |
| 27.5° | 789.6 | 786.0 | 782.3 | 779.2 | 776.7 | 774.2 | 771.7 | 769.2 |
| 30° | 760.6 | 756.2 | 751.8 | 748.3 | 745.5 | 742.7 | 739.9 | 737.1 |
| 32.5° | 730.9 | 725.9 | 720.7 | 716.9 | 714.3 | 711.7 | 708.9 | 706.3 |
| 35° | 686.7 | 680.8 | 674.9 | 670.3 | 667.2 | 664.0 | 660.9 | 657.7 |
| 37.5° | 639.2 | 632.7 | 626.0 | 621.2 | 617.9 | 614.8 | 611.7 | 608.5 |
| 40° | 607.7 | 600.4 | 593.0 | 587.8 | 584.6 | 581.5 | 578.3 | 575.2 |
| 42.5° | 576.6 | 569.2 | 561.7 | 556.3 | 553.0 | 549.8 | 546.4 | 543.2 |
| 45° | 529.1 | 520.5 | 511.9 | 506.0 | 502.9 | 499.8 | 496.7 | 493.5 |
| 47.5° | 481.1 | 472.2 | 463.3 | 457.2 | 453.7 | 450.3 | 446.9 | 443.3 |
| 50° | 449.3 | 440.6 | 431.8 | 425.9 | 422.5 | 419.2 | 415.9 | 412.5 |
| 52.5° | 417.6 | 408.7 | 399.9 | 393.7 | 390.2 | 386.8 | 383.3 | 379.9 |
| 55° | 370.8 | 361.7 | 352.6 | 346.5 | 343.2 | 339.8 | 336.5 | 333.2 |
| 57.5° | 325.1 | 315.9 | 306.7 | 300.8 | 298.3 | 295.8 | 293.3 | 290.7 |
| 60° | 294.6 | 285.5 | 276.4 | 270.5 | 267.7 | 264.9 | 262.2 | 259.3 |
| 62.5° | 264.6 | 256.2 | 247.8 | 242.5 | 240.2 | 238.0 | 235.8 | 233.6 |
| 65° | 221.6 | 214.0 | 206.5 | 201.7 | 199.7 | 197.5 | 195.4 | 193.3 |
| 67.5° | 182.0 | 175.5 | 169.1 | 164.7 | 162.4 | 160.1 | 157.7 | 155.4 |
| 70° | 155.1 | 149.4 | 143.5 | 139.8 | 138.0 | 136.3 | 134.5 | 132.8 |
| 72.5° | 131.0 | 126.0 | 121.1 | 117.9 | 116.2 | 114.6 | 113.0 | 111.4 |
| 75° | 96.4 | 92.5 | 88.5 | 85.9 | 84.8 | 83.8 | 82.8 | 81.7 |
| 77.5° | 68.3 | 65.9 | 63.5 | 62.2 | 61.9 | 61.6 | 61.3 | 61.0 |
| 80° | 52.4 | 51.9 | 51.3 | 51.0 | 50.8 | 50.6 | 50.5 | 50.3 |
| 82.5° | 40.7 | 40.3 | 40.0 | 39.7 | 39.5 | 39.3 | 39.2 | 39.0 |
| 85° | 23.6 | 23.3 | 22.9 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 |
| 87.5° | 11.4 | 11.4 | 11.4 | 11.5 | 11.7 | 11.9 | 12.0 | 12.2 |
| 90° | 14.2 | 14.9 | 15.8 | 16.3 | 16.6 | 16.8 | 17.1 | 17.3 |
| 92.5° | 13.7 | 14.5 | 15.2 | 15.7 | 15.8 | 15.8 | 15.9 | 15.9 |
| 95° | 14.2 | 14.9 | 15.8 | 16.2 | 16.4 | 16.5 | 16.6 | 16.7 |
| 97.5° | 15.3 | 15.5 | 15.6 | 15.7 | 15.8 | 15.9 | 16.0 | 16.2 |
| 100° | 21.0 | 18.8 | 16.7 | 15.7 | 15.8 | 15.9 | 16.0 | 16.2 |
| 102.5° | 75.1 | 51.7 | 28.2 | 16.5 | 16.6 | 16.6 | 16.6 | 16.6 |
| 105° | 182.1 | 183.2 | 184.3 | 182.6 | 178.0 | 173.4 | 168.7 | 164.2 |
| 107.5° | 225.2 | 225.8 | 226.3 | 226.8 | 227.3 | 227.8 | 228.3 | 228.8 |
| 110° | 254.6 | 254.8 | 255.1 | 255.4 | 255.8 | 256.1 | 256.5 | 256.9 |



TEST NUMBER: P332904-840

CATALOG NUMBER: SA4XXRDIP-C575D590U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 283.0 | 283.0 | 282.9 | 283.1 | 283.6 | 284.1 | 284.6 | 285.0 |
| 115° | 325.4 | 325.7 | 325.9 | 326.1 | 326.1 | 326.1 | 326.1 | 326.1 |
| 117.5° | 368.1 | 368.1 | 368.0 | 368.0 | 367.9 | 367.9 | 367.8 | 367.8 |
| 120° | 394.6 | 394.8 | 395.1 | 395.1 | 394.8 | 394.6 | 394.3 | 394.0 |
| 122.5° | 420.6 | 420.7 | 420.9 | 420.8 | 420.6 | 420.3 | 420.1 | 419.8 |
| 125° | 457.0 | 457.4 | 457.8 | 458.1 | 458.2 | 458.3 | 458.4 | 458.6 |
| 127.5° | 493.2 | 493.1 | 493.0 | 492.9 | 492.8 | 492.7 | 492.6 | 492.5 |
| 130° | 515.2 | 515.3 | 515.5 | 515.5 | 515.5 | 515.5 | 515.5 | 515.5 |
| 132.5° | 536.9 | 537.0 | 537.1 | 537.1 | 537.0 | 536.9 | 536.8 | 536.7 |
| 135° | 566.7 | 567.0 | 567.2 | 567.5 | 567.7 | 568.0 | 568.4 | 568.6 |
| 137.5° | 595.4 | 595.7 | 595.9 | 596.0 | 596.0 | 595.9 | 595.8 | 595.7 |
| 140° | 613.1 | 613.5 | 613.9 | 614.1 | 614.3 | 614.4 | 614.5 | 614.6 |
| 142.5° | 629.4 | 629.8 | 630.1 | 630.3 | 630.3 | 630.3 | 630.3 | 630.4 |
| 145° | 652.9 | 653.1 | 653.2 | 653.4 | 653.6 | 653.9 | 654.2 | 654.4 |
| 147.5° | 673.5 | 673.6 | 673.7 | 673.8 | 674.0 | 674.1 | 674.2 | 674.3 |
| 150° | 686.6 | 686.6 | 686.6 | 686.7 | 686.8 | 687.0 | 687.1 | 687.2 |
| 152.5° | 698.1 | 698.3 | 698.5 | 698.6 | 698.5 | 698.4 | 698.3 | 698.3 |
| 155° | 713.6 | 714.1 | 714.6 | 714.7 | 714.3 | 713.9 | 713.6 | 713.2 |
| 157.5° | 726.9 | 727.6 | 728.2 | 728.2 | 727.6 | 726.9 | 726.3 | 725.6 |
| 160° | 735.4 | 736.2 | 737.0 | 737.0 | 736.2 | 735.4 | 734.7 | 733.9 |
| 162.5° | 742.4 | 743.1 | 743.9 | 743.9 | 743.0 | 742.0 | 741.2 | 740.3 |
| 165° | 752.0 | 753.1 | 754.2 | 754.1 | 752.9 | 751.7 | 750.6 | 749.4 |
| 167.5° | 759.2 | 760.3 | 761.4 | 761.3 | 760.1 | 758.8 | 757.5 | 756.3 |
| 170° | 763.6 | 764.6 | 765.7 | 765.5 | 764.3 | 763.0 | 761.6 | 760.4 |
| 172.5° | 766.4 | 767.4 | 768.4 | 768.2 | 766.9 | 765.5 | 764.1 | 762.7 |
| 175° | 769.6 | 770.7 | 771.9 | 771.7 | 770.2 | 768.6 | 767.1 | 765.6 |
| 177.5° | 770.9 | 771.7 | 772.5 | 772.3 | 771.1 | 769.9 | 768.6 | 767.4 |
| 180° | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 |

(END OF REPORT)