

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: P331642-930

Luminaire Tested: **S122RDIP-S290D1080U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331642-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDIP-S290D1080U930-4F0-1E-UDD-F
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1080 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4354.8 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

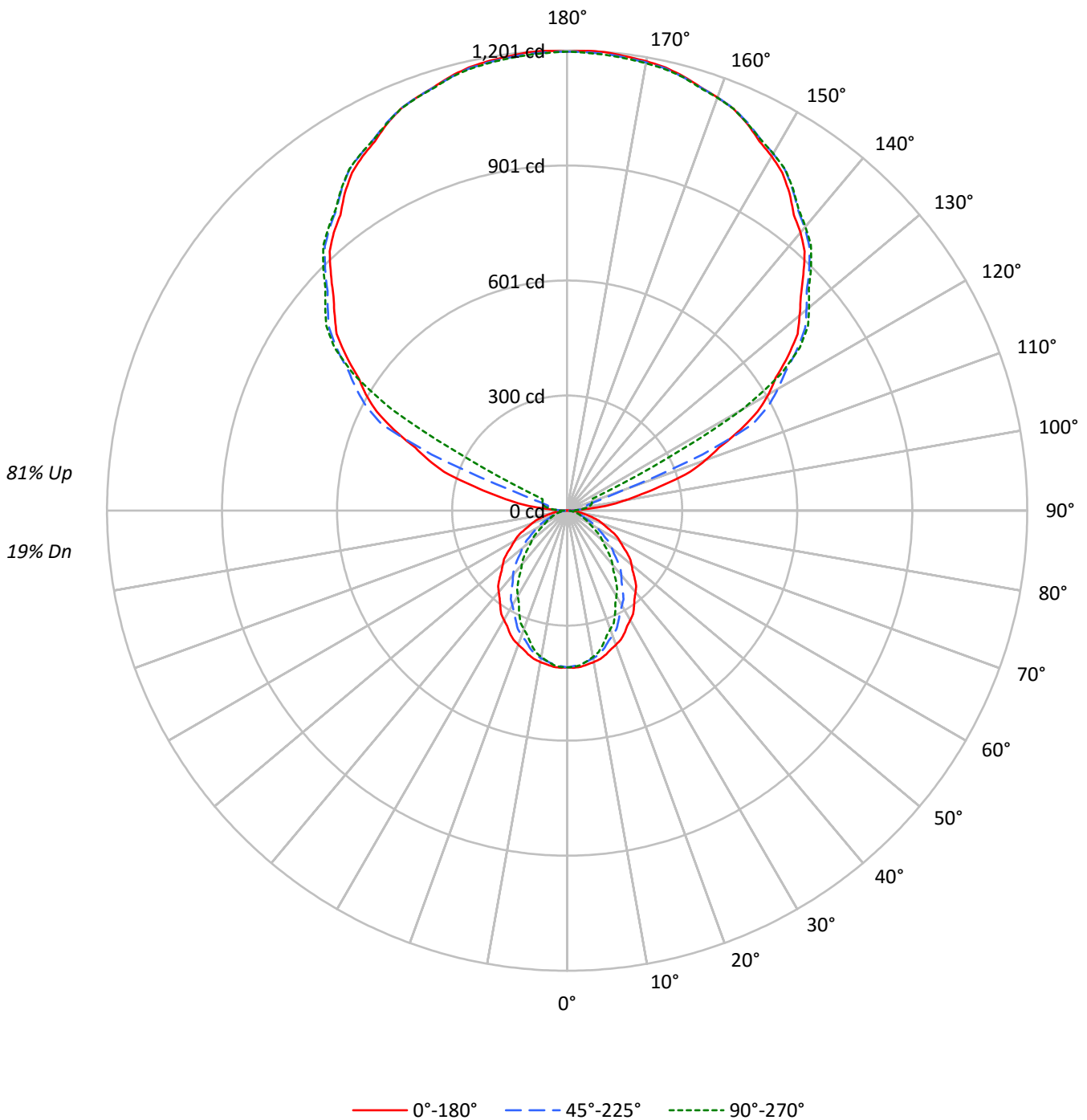
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331642-930

CATALOG NUMBER: S122RDIP-S290D1080U930-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P331642-930

CATALOG NUMBER: S122RDIP-S290D1080U930-4F0-1E-UDD-F

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 | 100 | 100 | 100 | 100 | 88 | 88 | 88 | 88 | 66 | 66 | 66 | 46 | 46 | 46 | 28 | 28 | 28 | 19 |
| 1 | 91 | 87 | 83 | 80 | 80 | 77 | 74 | 71 | 58 | 56 | 54 | 41 | 40 | 39 | 25 | 24 | 24 | 17 |
| 2 | 83 | 76 | 70 | 66 | 73 | 67 | 63 | 59 | 51 | 48 | 45 | 36 | 34 | 33 | 22 | 21 | 20 | 14 |
| 3 | 76 | 67 | 60 | 55 | 67 | 59 | 54 | 49 | 45 | 41 | 38 | 32 | 30 | 28 | 20 | 19 | 18 | 12 |
| 4 | 69 | 59 | 52 | 46 | 61 | 53 | 46 | 42 | 40 | 36 | 33 | 29 | 26 | 24 | 18 | 16 | 15 | 11 |
| 5 | 64 | 53 | 45 | 39 | 56 | 47 | 40 | 36 | 36 | 31 | 28 | 26 | 23 | 21 | 16 | 15 | 13 | 9 |
| 6 | 58 | 47 | 40 | 34 | 51 | 42 | 36 | 31 | 32 | 28 | 24 | 23 | 20 | 18 | 15 | 13 | 12 | 8 |
| 7 | 54 | 42 | 35 | 30 | 47 | 38 | 31 | 27 | 29 | 25 | 21 | 21 | 18 | 16 | 13 | 12 | 10 | 7 |
| 8 | 50 | 38 | 31 | 26 | 44 | 34 | 28 | 24 | 26 | 22 | 19 | 19 | 16 | 14 | 12 | 11 | 9 | 7 |
| 9 | 46 | 35 | 28 | 23 | 41 | 31 | 25 | 21 | 24 | 20 | 17 | 18 | 15 | 13 | 11 | 10 | 9 | 6 |
| 10 | 43 | 32 | 25 | 21 | 38 | 28 | 23 | 19 | 22 | 18 | 15 | 16 | 13 | 11 | 10 | 9 | 8 | 6 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 6608 | 6608 | 6608 |
| 5° | 6634 | 6525 | 6561 |
| 10° | 6583 | 6419 | 6365 |
| 15° | 6506 | 6228 | 6048 |
| 20° | 6402 | 5957 | 5658 |
| 25° | 6296 | 5649 | 5279 |
| 30° | 6145 | 5330 | 4793 |
| 35° | 6000 | 4987 | 4366 |
| 40° | 5855 | 4628 | 3872 |
| 45° | 5683 | 4229 | 3425 |
| 50° | 5506 | 3823 | 2987 |
| 55° | 5326 | 3386 | 2567 |
| 60° | 5118 | 2929 | 2131 |
| 65° | 4883 | 2460 | 1937 |
| 70° | 4598 | 2030 | 1780 |
| 75° | 4255 | 1847 | 1666 |
| 80° | 3756 | 1655 | 1516 |
| 85° | 2946 | 1297 | 1297 |



TEST NUMBER: P331642-930

CATALOG NUMBER: S122RDIP-S290D1080U930-4F0-1E-UDD-F

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 38.3 | 0.9 |
| 10°-20° | 105.2 | 2.4 |
| 20°-30° | 147.7 | 3.4 |
| 30°-40° | 161.1 | 3.7 |
| 40°-50° | 148.1 | 3.4 |
| 50°-60° | 116.3 | 2.7 |
| 60°-70° | 75.8 | 1.7 |
| 70°-80° | 39.1 | 0.9 |
| 80°-90° | 13.1 | 0.3 |
| 90°-100° | 40.0 | 0.9 |
| 100°-110° | 146.5 | 3.4 |
| 110°-120° | 391.7 | 9.0 |
| 120°-130° | 646.5 | 14.8 |
| 130°-140° | 687.6 | 15.8 |
| 140°-150° | 639.1 | 14.7 |
| 150°-160° | 513.8 | 11.8 |
| 160°-170° | 331.1 | 7.6 |
| 170°-180° | 114.0 | 2.6 |
| 0°-30° | 291.2 | 6.7 |
| 0°-40° | 452.3 | 10.4 |
| 0°-60° | 716.7 | 16.5 |
| 0°-90° | 844.7 | 19.4 |
| 90°-120° | 578.1 | 13.3 |
| 90°-150° | 2551.3 | 58.6 |
| 90°-180° | 3510.0 | 80.6 |
| 0°-180° | 4354.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 409 | 409 | 409 | 409 | 409 | |
| 5° | 409 | 407 | 403 | 406 | 405 | 39 |
| 15° | 389 | 385 | 373 | 366 | 362 | 110 |
| 25° | 353 | 341 | 317 | 302 | 296 | 162 |
| 35° | 304 | 285 | 253 | 230 | 222 | 190 |
| 45° | 249 | 223 | 185 | 160 | 150 | 192 |
| 55° | 189 | 160 | 120 | 99 | 91 | 169 |
| 65° | 128 | 98 | 64 | 52 | 51 | 127 |
| 75° | 68 | 43 | 30 | 27 | 27 | 72 |
| 85° | 16 | 8 | 7 | 7 | 7 | 19 |
| 90° | 1 | 10 | 17 | 22 | 23 | 3 |
| 95° | 56 | 30 | 34 | 38 | 37 | 69 |
| 105° | 264 | 275 | 53 | 62 | 66 | 282 |
| 115° | 498 | 513 | 535 | 152 | 71 | 491 |
| 125° | 705 | 716 | 732 | 738 | 741 | 628 |
| 135° | 872 | 885 | 894 | 902 | 900 | 673 |
| 145° | 1012 | 1011 | 1025 | 1031 | 1027 | 632 |
| 155° | 1114 | 1107 | 1116 | 1121 | 1115 | 513 |
| 165° | 1174 | 1169 | 1171 | 1176 | 1171 | 331 |
| 175° | 1200 | 1195 | 1196 | 1201 | 1193 | 114 |
| 180° | 1198 | 1198 | 1198 | 1198 | 1198 | |



TEST NUMBER: P331642-930

CATALOG NUMBER: S122RDIP-S290D1080U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 409.3 | 409.3 | 409.3 | 409.3 | 409.3 | 409.3 | 409.3 | 409.3 | 409.3 | 409.3 | 409.3 |
| 2.5° | 410.7 | 410.4 | 410.1 | 409.8 | 409.4 | 408.9 | 408.1 | 407.5 | 406.8 | 406.0 | 406.7 |
| 5° | 409.3 | 408.9 | 408.5 | 408.1 | 407.6 | 406.8 | 405.8 | 404.7 | 403.7 | 402.6 | 403.3 |
| 7.5° | 405.0 | 404.6 | 404.0 | 403.5 | 403.0 | 402.1 | 400.9 | 399.6 | 398.4 | 397.1 | 397.3 |
| 10° | 401.5 | 400.9 | 400.3 | 399.7 | 399.2 | 398.0 | 396.4 | 394.8 | 393.1 | 391.5 | 391.3 |
| 12.5° | 397.1 | 396.3 | 395.6 | 394.9 | 394.2 | 392.8 | 390.7 | 388.6 | 386.5 | 384.3 | 383.9 |
| 15° | 389.2 | 388.3 | 387.4 | 386.5 | 385.6 | 383.8 | 381.0 | 378.2 | 375.4 | 372.6 | 371.0 |
| 17.5° | 379.7 | 378.3 | 376.9 | 375.5 | 374.1 | 371.7 | 368.1 | 364.5 | 360.9 | 357.3 | 355.5 |
| 20° | 372.6 | 371.0 | 369.3 | 367.6 | 366.0 | 363.1 | 359.0 | 354.9 | 350.8 | 346.7 | 344.6 |
| 22.5° | 364.9 | 363.1 | 361.2 | 359.4 | 357.5 | 354.2 | 349.6 | 345.0 | 340.4 | 335.7 | 333.0 |
| 25° | 353.4 | 350.7 | 348.1 | 345.4 | 342.8 | 338.8 | 333.3 | 327.9 | 322.5 | 317.1 | 313.6 |
| 27.5° | 339.4 | 336.6 | 333.7 | 330.8 | 327.9 | 323.4 | 317.3 | 311.2 | 305.1 | 299.0 | 295.1 |
| 30° | 329.6 | 326.5 | 323.3 | 320.2 | 317.2 | 312.3 | 305.7 | 299.1 | 292.5 | 285.9 | 281.8 |
| 32.5° | 320.2 | 316.5 | 312.8 | 309.2 | 305.5 | 300.4 | 293.7 | 286.9 | 280.2 | 273.5 | 268.7 |
| 35° | 304.4 | 300.3 | 296.0 | 291.9 | 287.6 | 281.9 | 274.7 | 267.4 | 260.2 | 253.0 | 247.8 |
| 37.5° | 288.8 | 284.1 | 279.5 | 274.9 | 270.3 | 264.2 | 256.4 | 248.7 | 241.0 | 233.3 | 227.6 |
| 40° | 277.8 | 272.9 | 267.9 | 262.9 | 258.0 | 251.6 | 243.6 | 235.6 | 227.6 | 219.6 | 213.8 |
| 42.5° | 266.5 | 261.3 | 256.1 | 250.9 | 245.7 | 239.0 | 230.7 | 222.5 | 214.3 | 206.0 | 200.0 |
| 45° | 248.9 | 243.4 | 237.8 | 232.4 | 226.8 | 219.7 | 211.1 | 202.4 | 193.8 | 185.2 | 179.4 |
| 47.5° | 231.7 | 225.8 | 220.0 | 214.2 | 208.3 | 201.0 | 192.0 | 183.1 | 174.1 | 165.3 | 159.5 |
| 50° | 219.2 | 213.4 | 207.6 | 201.7 | 195.9 | 188.4 | 179.4 | 170.3 | 161.3 | 152.2 | 146.5 |
| 52.5° | 207.1 | 201.0 | 194.9 | 188.8 | 182.7 | 175.2 | 166.3 | 157.5 | 148.6 | 139.7 | 134.3 |
| 55° | 189.2 | 182.9 | 176.4 | 170.0 | 163.5 | 156.0 | 147.0 | 138.1 | 129.2 | 120.3 | 115.4 |
| 57.5° | 171.0 | 164.4 | 157.8 | 151.2 | 144.6 | 137.1 | 128.5 | 120.0 | 111.5 | 102.9 | 98.3 |
| 60° | 158.5 | 152.0 | 145.4 | 138.8 | 132.2 | 124.7 | 116.2 | 107.7 | 99.2 | 90.7 | 86.5 |
| 62.5° | 146.3 | 139.8 | 133.2 | 126.6 | 120.0 | 112.7 | 104.6 | 96.5 | 88.5 | 80.4 | 76.4 |
| 65° | 127.8 | 121.1 | 114.5 | 107.8 | 101.1 | 94.1 | 86.7 | 79.2 | 71.8 | 64.4 | 61.6 |
| 67.5° | 109.8 | 103.2 | 96.6 | 90.0 | 83.4 | 76.7 | 70.0 | 63.4 | 56.7 | 50.1 | 48.8 |
| 70° | 97.4 | 91.0 | 84.5 | 78.2 | 71.7 | 65.7 | 60.0 | 54.3 | 48.7 | 43.0 | 42.2 |
| 72.5° | 85.5 | 79.4 | 73.2 | 67.1 | 60.9 | 55.6 | 51.0 | 46.5 | 41.9 | 37.3 | 36.6 |
| 75° | 68.2 | 62.4 | 56.7 | 50.9 | 45.1 | 40.8 | 38.0 | 35.2 | 32.4 | 29.6 | 29.0 |
| 77.5° | 51.0 | 46.0 | 40.9 | 35.9 | 30.8 | 27.6 | 26.3 | 24.9 | 23.6 | 22.3 | 21.9 |
| 80° | 40.4 | 36.2 | 32.0 | 27.8 | 23.6 | 21.0 | 20.2 | 19.4 | 18.6 | 17.8 | 17.4 |
| 82.5° | 30.6 | 27.3 | 24.1 | 20.8 | 17.5 | 15.6 | 15.0 | 14.4 | 13.9 | 13.4 | 13.1 |
| 85° | 15.9 | 14.2 | 12.5 | 10.8 | 9.0 | 8.0 | 7.7 | 7.5 | 7.3 | 7.0 | 7.0 |
| 87.5° | 4.9 | 4.8 | 4.7 | 4.6 | 4.5 | 4.6 | 4.9 | 5.2 | 5.5 | 5.9 | 6.0 |
| 90° | 0.9 | 3.0 | 5.1 | 7.3 | 9.4 | 11.2 | 12.7 | 14.3 | 15.8 | 17.4 | 18.3 |
| 92.5° | 17.5 | 17.3 | 17.1 | 17.0 | 16.7 | 17.0 | 17.8 | 18.6 | 19.3 | 20.1 | 20.6 |
| 95° | 56.3 | 50.0 | 43.6 | 37.3 | 30.9 | 28.4 | 29.8 | 31.1 | 32.4 | 33.8 | 34.7 |
| 97.5° | 111.8 | 93.9 | 76.0 | 58.0 | 40.2 | 32.8 | 35.9 | 39.0 | 42.2 | 45.2 | 46.0 |
| 100° | 153.4 | 127.0 | 100.6 | 74.3 | 47.9 | 36.3 | 39.5 | 42.9 | 46.1 | 49.4 | 51.0 |
| 102.5° | 199.2 | 193.6 | 188.0 | 182.4 | 176.8 | 160.4 | 133.0 | 105.6 | 78.2 | 50.8 | 52.8 |
| 105° | 263.5 | 269.3 | 275.0 | 280.8 | 286.6 | 263.2 | 210.6 | 158.0 | 105.4 | 52.8 | 55.0 |
| 107.5° | 336.8 | 341.4 | 346.1 | 350.7 | 355.5 | 326.3 | 263.2 | 200.2 | 137.1 | 74.0 | 71.8 |
| 110° | 383.9 | 388.0 | 392.1 | 396.1 | 400.1 | 374.3 | 318.6 | 263.0 | 207.3 | 151.6 | 132.4 |



TEST NUMBER: P331642-930

CATALOG NUMBER: S122RDIP-S290D1080U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 428.4 | 431.9 | 435.5 | 439.0 | 442.6 | 437.6 | 423.8 | 410.1 | 396.3 | 382.5 | 312.3 |
| 115° | 498.4 | 501.7 | 504.9 | 508.2 | 511.4 | 515.5 | 520.3 | 525.1 | 529.9 | 534.8 | 445.6 |
| 117.5° | 560.9 | 564.6 | 568.3 | 571.9 | 575.6 | 579.0 | 582.4 | 585.7 | 589.0 | 592.3 | 570.7 |
| 120° | 606.7 | 609.6 | 612.5 | 615.4 | 618.2 | 621.4 | 624.9 | 628.4 | 631.9 | 635.3 | 637.6 |
| 122.5° | 645.6 | 648.6 | 651.6 | 654.7 | 657.7 | 661.1 | 664.9 | 668.6 | 672.5 | 676.2 | 677.6 |
| 125° | 704.7 | 707.1 | 709.6 | 712.2 | 714.6 | 717.7 | 721.4 | 725.0 | 728.7 | 732.4 | 733.7 |
| 127.5° | 758.2 | 761.0 | 763.8 | 766.5 | 769.3 | 772.0 | 774.8 | 777.5 | 780.2 | 783.0 | 785.0 |
| 130° | 792.1 | 795.2 | 798.3 | 801.4 | 804.5 | 807.1 | 809.2 | 811.3 | 813.4 | 815.5 | 817.7 |
| 132.5° | 826.8 | 829.5 | 832.1 | 834.7 | 837.3 | 839.7 | 841.8 | 843.9 | 846.0 | 848.2 | 849.9 |
| 135° | 871.9 | 875.0 | 878.1 | 881.2 | 884.2 | 886.6 | 888.4 | 890.1 | 891.9 | 893.6 | 895.5 |
| 137.5° | 917.5 | 919.7 | 921.8 | 924.0 | 926.1 | 928.1 | 930.2 | 932.1 | 934.1 | 936.0 | 937.9 |
| 140° | 947.3 | 948.8 | 950.4 | 951.9 | 953.5 | 955.3 | 957.4 | 959.5 | 961.6 | 963.8 | 965.5 |
| 142.5° | 972.2 | 973.6 | 975.0 | 976.4 | 977.8 | 979.7 | 982.1 | 984.6 | 987.0 | 989.4 | 991.0 |
| 145° | 1011.5 | 1011.2 | 1011.1 | 1010.9 | 1010.6 | 1012.2 | 1015.5 | 1018.7 | 1022.1 | 1025.3 | 1026.6 |
| 147.5° | 1045.6 | 1044.9 | 1044.2 | 1043.4 | 1042.7 | 1043.9 | 1047.2 | 1050.4 | 1053.6 | 1056.9 | 1057.9 |
| 150° | 1067.8 | 1066.4 | 1065.1 | 1063.7 | 1062.4 | 1063.2 | 1066.3 | 1069.4 | 1072.5 | 1075.5 | 1076.8 |
| 152.5° | 1086.5 | 1085.0 | 1083.5 | 1082.0 | 1080.5 | 1081.2 | 1084.1 | 1087.0 | 1090.0 | 1092.9 | 1094.1 |
| 155° | 1113.7 | 1112.0 | 1110.3 | 1108.5 | 1106.8 | 1107.1 | 1109.4 | 1111.7 | 1114.0 | 1116.3 | 1117.4 |
| 157.5° | 1135.1 | 1133.6 | 1132.1 | 1130.7 | 1129.2 | 1129.3 | 1130.9 | 1132.5 | 1134.1 | 1135.7 | 1137.0 |
| 160° | 1147.5 | 1146.4 | 1145.2 | 1144.0 | 1142.9 | 1142.9 | 1144.0 | 1145.2 | 1146.4 | 1147.5 | 1148.7 |
| 162.5° | 1158.6 | 1157.5 | 1156.3 | 1155.1 | 1154.0 | 1153.9 | 1154.9 | 1155.9 | 1156.9 | 1157.9 | 1159.2 |
| 165° | 1173.5 | 1172.3 | 1171.2 | 1170.0 | 1168.9 | 1168.6 | 1169.1 | 1169.8 | 1170.4 | 1170.9 | 1172.2 |
| 167.5° | 1184.6 | 1183.5 | 1182.3 | 1181.1 | 1180.0 | 1179.7 | 1180.2 | 1180.7 | 1181.3 | 1181.9 | 1183.2 |
| 170° | 1190.8 | 1189.7 | 1188.5 | 1187.4 | 1186.3 | 1185.9 | 1186.3 | 1186.6 | 1187.0 | 1187.4 | 1188.7 |
| 172.5° | 1195.0 | 1193.8 | 1192.7 | 1191.6 | 1190.4 | 1190.0 | 1190.4 | 1190.7 | 1191.2 | 1191.6 | 1192.9 |
| 175° | 1200.4 | 1199.1 | 1197.7 | 1196.4 | 1195.0 | 1194.5 | 1194.9 | 1195.3 | 1195.6 | 1196.0 | 1197.4 |
| 177.5° | 1201.3 | 1200.2 | 1199.1 | 1198.0 | 1196.9 | 1196.5 | 1196.6 | 1196.8 | 1196.9 | 1197.1 | 1198.2 |
| 180° | 1197.8 | 1197.8 | 1197.8 | 1197.8 | 1197.8 | 1197.8 | 1197.8 | 1197.8 | 1197.8 | 1197.8 | 1197.8 |



TEST NUMBER: P331642-930

CATALOG NUMBER: S122RDIP-S290D1080U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 409.3 | 409.3 | 409.3 | 409.3 | 409.3 | 409.3 | 409.3 | 409.3 |
| 2.5° | 407.3 | 408.0 | 408.6 | 408.9 | 408.8 | 408.6 | 408.5 | 408.4 |
| 5° | 404.1 | 404.8 | 405.5 | 405.8 | 405.5 | 405.3 | 405.0 | 404.8 |
| 7.5° | 397.5 | 397.8 | 397.9 | 397.9 | 397.5 | 397.0 | 396.6 | 396.2 |
| 10° | 391.0 | 390.8 | 390.5 | 390.1 | 389.6 | 389.1 | 388.7 | 388.2 |
| 12.5° | 383.5 | 383.0 | 382.6 | 382.0 | 381.2 | 380.3 | 379.5 | 378.7 |
| 15° | 369.5 | 367.9 | 366.3 | 365.2 | 364.4 | 363.5 | 362.6 | 361.8 |
| 17.5° | 353.6 | 351.7 | 349.9 | 348.3 | 346.8 | 345.4 | 344.0 | 342.6 |
| 20° | 342.6 | 340.5 | 338.4 | 336.5 | 334.7 | 332.9 | 331.1 | 329.3 |
| 22.5° | 330.4 | 327.8 | 325.1 | 323.1 | 321.7 | 320.4 | 319.0 | 317.7 |
| 25° | 310.3 | 306.9 | 303.5 | 301.3 | 300.0 | 298.7 | 297.5 | 296.3 |
| 27.5° | 291.1 | 287.1 | 283.2 | 280.3 | 278.3 | 276.4 | 274.4 | 272.5 |
| 30° | 277.5 | 273.4 | 269.1 | 266.0 | 263.7 | 261.5 | 259.3 | 257.1 |
| 32.5° | 263.9 | 259.1 | 254.3 | 250.9 | 248.8 | 246.7 | 244.6 | 242.6 |
| 35° | 242.6 | 237.4 | 232.2 | 228.7 | 226.9 | 225.1 | 223.3 | 221.5 |
| 37.5° | 221.8 | 216.1 | 210.4 | 206.5 | 204.5 | 202.4 | 200.3 | 198.2 |
| 40° | 208.0 | 202.1 | 196.2 | 192.2 | 190.1 | 188.0 | 185.8 | 183.7 |
| 42.5° | 193.9 | 187.8 | 181.8 | 177.8 | 175.7 | 173.7 | 171.5 | 169.5 |
| 45° | 173.5 | 167.6 | 161.8 | 157.9 | 156.0 | 153.9 | 152.0 | 150.0 |
| 47.5° | 153.6 | 147.8 | 142.0 | 138.2 | 136.4 | 134.6 | 132.8 | 131.0 |
| 50° | 140.9 | 135.2 | 129.5 | 125.8 | 124.1 | 122.4 | 120.6 | 118.9 |
| 52.5° | 128.8 | 123.4 | 117.9 | 114.3 | 112.8 | 111.1 | 109.5 | 107.9 |
| 55° | 110.5 | 105.6 | 100.6 | 97.3 | 95.8 | 94.2 | 92.7 | 91.2 |
| 57.5° | 93.8 | 89.3 | 84.8 | 81.9 | 80.6 | 79.2 | 77.9 | 76.6 |
| 60° | 82.3 | 78.2 | 73.9 | 71.2 | 69.9 | 68.6 | 67.3 | 66.0 |
| 62.5° | 72.4 | 68.4 | 64.4 | 62.0 | 61.1 | 60.4 | 59.6 | 58.8 |
| 65° | 58.9 | 56.0 | 53.2 | 51.7 | 51.4 | 51.2 | 51.0 | 50.7 |
| 67.5° | 47.5 | 46.2 | 44.9 | 44.2 | 43.9 | 43.6 | 43.4 | 43.1 |
| 70° | 41.3 | 40.5 | 39.7 | 39.1 | 38.7 | 38.4 | 38.1 | 37.7 |
| 72.5° | 36.0 | 35.2 | 34.6 | 34.2 | 33.9 | 33.8 | 33.5 | 33.3 |
| 75° | 28.5 | 27.9 | 27.3 | 27.0 | 26.9 | 26.8 | 26.7 | 26.7 |
| 77.5° | 21.5 | 21.2 | 20.9 | 20.7 | 20.5 | 20.4 | 20.3 | 20.1 |
| 80° | 17.1 | 16.8 | 16.5 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 |
| 82.5° | 13.0 | 12.7 | 12.6 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| 85° | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| 87.5° | 6.1 | 6.2 | 6.4 | 6.4 | 6.5 | 6.6 | 6.7 | 6.8 |
| 90° | 19.2 | 20.2 | 21.2 | 21.9 | 22.3 | 22.7 | 23.0 | 23.4 |
| 92.5° | 21.1 | 21.6 | 22.1 | 22.5 | 22.7 | 22.9 | 23.2 | 23.4 |
| 95° | 35.7 | 36.7 | 37.7 | 38.1 | 37.8 | 37.7 | 37.4 | 37.3 |
| 97.5° | 46.8 | 47.5 | 48.3 | 48.8 | 49.1 | 49.3 | 49.5 | 49.7 |
| 100° | 52.5 | 54.1 | 55.6 | 56.5 | 56.9 | 57.3 | 57.7 | 58.0 |
| 102.5° | 54.8 | 56.8 | 58.8 | 60.1 | 60.6 | 61.1 | 61.7 | 62.2 |
| 105° | 57.1 | 59.2 | 61.3 | 62.8 | 63.6 | 64.3 | 65.1 | 65.9 |
| 107.5° | 69.7 | 67.5 | 65.4 | 64.7 | 65.5 | 66.2 | 67.0 | 67.8 |
| 110° | 113.2 | 93.9 | 74.6 | 65.4 | 66.1 | 66.9 | 67.7 | 68.5 |



TEST NUMBER: P331642-930

CATALOG NUMBER: S122RDIP-S290D1080U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 242.1 | 171.8 | 101.5 | 66.7 | 67.3 | 67.9 | 68.6 | 69.1 |
| 115° | 356.4 | 267.3 | 178.1 | 126.5 | 112.7 | 98.8 | 85.0 | 71.1 |
| 117.5° | 549.2 | 527.6 | 506.1 | 472.5 | 426.9 | 381.3 | 335.7 | 290.2 |
| 120° | 639.9 | 642.2 | 644.6 | 632.7 | 606.7 | 580.7 | 554.6 | 528.7 |
| 122.5° | 679.0 | 680.4 | 681.8 | 679.9 | 674.9 | 669.8 | 664.8 | 659.7 |
| 125° | 735.1 | 736.4 | 737.8 | 738.7 | 739.3 | 739.9 | 740.5 | 741.0 |
| 127.5° | 786.9 | 788.9 | 790.8 | 791.9 | 792.0 | 792.1 | 792.2 | 792.3 |
| 130° | 819.8 | 821.9 | 824.0 | 825.0 | 824.8 | 824.6 | 824.4 | 824.3 |
| 132.5° | 851.7 | 853.6 | 855.4 | 856.2 | 856.0 | 855.8 | 855.7 | 855.4 |
| 135° | 897.4 | 899.4 | 901.2 | 902.0 | 901.6 | 901.2 | 900.9 | 900.5 |
| 137.5° | 939.8 | 941.7 | 943.5 | 944.2 | 943.5 | 942.9 | 942.2 | 941.6 |
| 140° | 967.3 | 969.0 | 970.7 | 971.1 | 970.1 | 969.1 | 968.2 | 967.3 |
| 142.5° | 992.5 | 994.2 | 995.7 | 996.1 | 995.1 | 994.1 | 993.2 | 992.2 |
| 145° | 1028.0 | 1029.3 | 1030.7 | 1030.9 | 1030.0 | 1029.0 | 1028.0 | 1027.0 |
| 147.5° | 1058.8 | 1059.9 | 1060.9 | 1060.9 | 1060.1 | 1059.3 | 1058.5 | 1057.7 |
| 150° | 1077.9 | 1079.0 | 1080.2 | 1080.3 | 1079.3 | 1078.4 | 1077.4 | 1076.4 |
| 152.5° | 1095.2 | 1096.4 | 1097.6 | 1097.5 | 1096.2 | 1094.9 | 1093.6 | 1092.4 |
| 155° | 1118.6 | 1119.8 | 1121.0 | 1120.7 | 1119.2 | 1117.7 | 1116.1 | 1114.6 |
| 157.5° | 1138.3 | 1139.6 | 1140.9 | 1140.8 | 1139.4 | 1137.8 | 1136.4 | 1134.8 |
| 160° | 1149.8 | 1151.0 | 1152.1 | 1152.0 | 1150.7 | 1149.3 | 1148.0 | 1146.6 |
| 162.5° | 1160.5 | 1161.8 | 1163.2 | 1162.9 | 1161.3 | 1159.7 | 1158.0 | 1156.3 |
| 165° | 1173.6 | 1174.9 | 1176.3 | 1176.3 | 1174.9 | 1173.6 | 1172.2 | 1170.9 |
| 167.5° | 1184.5 | 1185.9 | 1187.2 | 1187.0 | 1185.3 | 1183.6 | 1181.9 | 1180.1 |
| 170° | 1190.1 | 1191.4 | 1192.8 | 1192.5 | 1190.8 | 1189.1 | 1187.4 | 1185.6 |
| 172.5° | 1194.3 | 1195.6 | 1196.9 | 1196.8 | 1195.0 | 1193.3 | 1191.6 | 1189.8 |
| 175° | 1198.7 | 1200.1 | 1201.4 | 1201.2 | 1199.2 | 1197.3 | 1195.4 | 1193.4 |
| 177.5° | 1199.2 | 1200.3 | 1201.4 | 1201.3 | 1199.9 | 1198.5 | 1197.1 | 1195.7 |
| 180° | 1197.8 | 1197.8 | 1197.8 | 1197.8 | 1197.8 | 1197.8 | 1197.8 | 1197.8 |

(END OF REPORT)