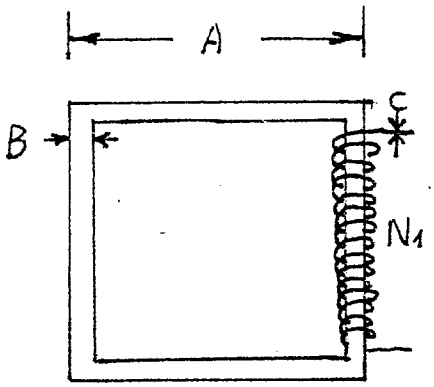
27/7/97






Sheet1

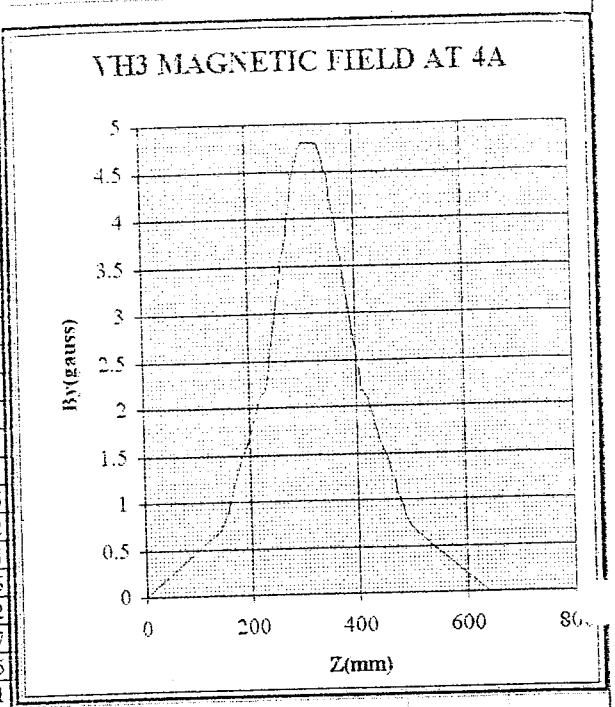
SUMMARY OF STEERING COILS CHARACTERISTICS

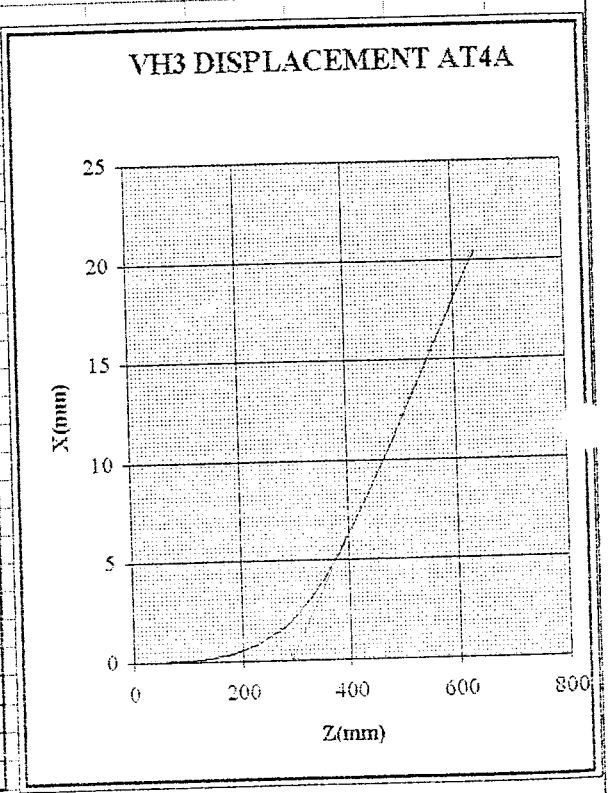
| | A | B | C | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OIL | iron ext.ext | iron cross | wire dia. | Imax | windings | Bmax/A | Φ/I | Φmax | X at 1A |
| | mm*mm | mm*mm | mm | A | $N_1$ | gauss | mrad/A | mrad | mm |
| VH3 | 207x207 | 11x11 | 2 | 10 | 50 | 1.2 | 15.4 | 154 | 5.1 |
| VH4 | 124x124 | 11x11 | 1.35 | 6 | 180 | 12.24 | 23.2 | 140 | 3.7 |
| VH5 | 207x207 | 11x11 | 0.5 | 1.5 | 520 | 7.3 | 41 | 62 | 9.5 |
| VH6 | ~~217x217~~ | 11x11 | 1.2 | 6 | 160 | 3.85 | 13.4 | 960 | 3.6 |
| VH7=VH4 = VH7A | | | | | | | | | |

VH

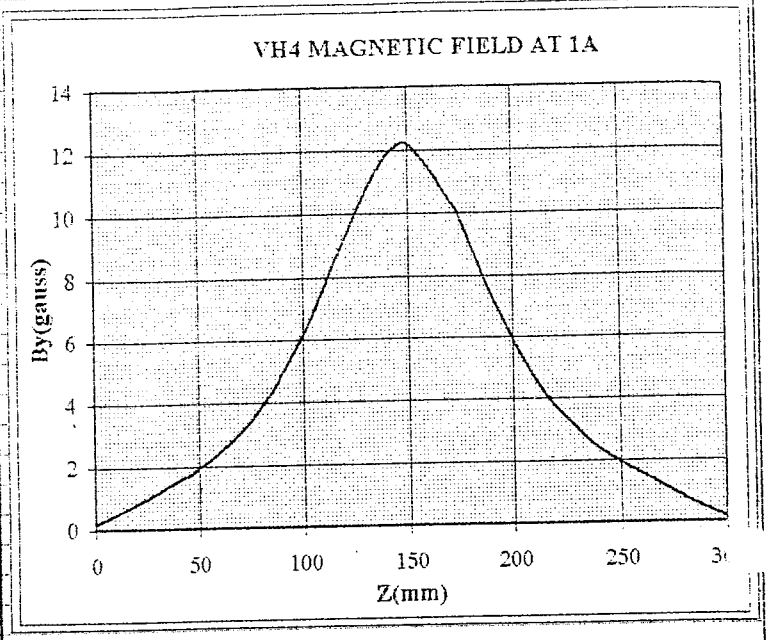
| Z mm | By(gauss) 4A | 0 | 4A(net) |
|---|---|---|---|
| -320 | 0 | 0 | 0 |
| -300 | 0 | -0.1 | 0.1 |
| -280 | 0 | -0.2 | 0.2 |
| -260 | 0 | -0.3 | 0.3 |
| -240 | 0 | -0.4 | 0.4 |
| -220 | 0.2 | -0.3 | 0.5 |
| -200 | 0.3 | -0.3 | 0.6 |
| -180 | 0.5 | -0.2 | 0.7 |
| -160 | 0.8 | -0.2 | 1 |
| -140 | 1.2 | -0.2 | 1.4 |
| -120 | 1.6 | -0.1 | 1.7 |
| -100 | 2.2 | 0.1 | 2.1 |
| -90 | 2.4 | 0.2 | 2.2 |
| -80 | 2.9 | 0.3 | 2.6 |
| -70 | 3.4 | 0.4 | 3 |
| -60 | 3.9 | 0.5 | 3.4 |
| -55 | 4.2 | 0.6 | 3.6 |
| -50 | 4.3 | 0.6 | 3.7 |
| -45 | 4.7 | 0.7 | 4 |
| -40 | 4.9 | 0.8 | 4.1 |
| -35 | 5.2 | 0.8 | 4.4 |
| -30 | 5.3 | 0.8 | 4.5 |
| -25 | 5.5 | 0.9 | 4.6 |
| -20 | 5.6 | 0.9 | 4.7 |
| -15 | 5.7 | 0.9 | 4.8 |
| -10 | 5.8 | 1 | 4.8 |
| -5 | 5.8 | 1 | 4.8 |
| 0 | 5.8 | 1 | 4.8 |
| 5 | 5.8 | 1 | 4.8 |
| 10 | 5.8 | 1 | 4.8 |
| 15 | 5.7 | 0.9 | 4.8 |
| 20 | 5.6 | 0.9 | 4.7 |
| 25 | 5.5 | 0.9 | 4.6 |
| 30 | 5.3 | 0.8 | 4.5 |
| 35 | 5.2 | 0.8 | 4.4 |
| 40 | 4.9 | 0.8 | 4.1 |
| 45 | 4.7 | 0.7 | 4 |
| 50 | 4.3 | 0.6 | 3.7 |
| 55 | 4.2 | 0.6 | 3.6 |
| 60 | 3.9 | 0.5 | 3.4 |
| 70 | 3.4 | 0.4 | 3 |
| 80 | 2.9 | 0.3 | 2.6 |
| 90 | 2.4 | 0.2 | 2.2 |
| 100 | 2.2 | 0.1 | 2.1 |
| 120 | 1.6 | -0.1 | 1.7 |
| 140 | 1.2 | -0.2 | 1.4 |
| 160 | 0.8 | -0.2 | 1 |
| 180 | 0.5 | -0.2 | 0.7 |
| 200 | 0.3 | -0.3 | 0.6 |
| 220 | 0.2 | -0.3 | 0.5 |
| 240 | 0 | -0.4 | 0.4 |
| 260 | 0 | -0.3 | 0.3 |
| 280 | 0 | -0.2 | 0.2 |
| 300 | 0 | -0.1 | 0.1 |
| 320 | 0 | 0 | 0 |

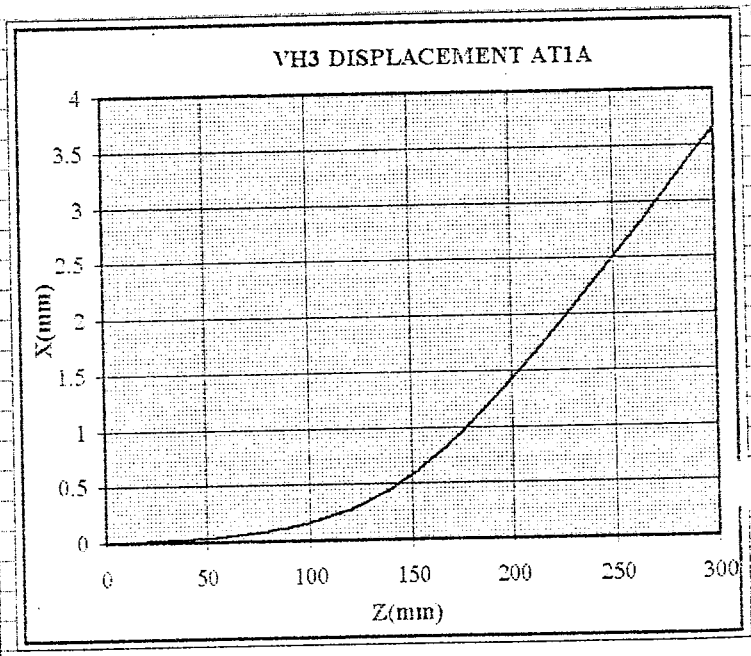
| Z mm | By(gauss) | 1st.Int. | 2nd.Int. | 2nd.Int* 5.9E-05 |
|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 |
| 20 | 0.1 | 1 | 20 | 0.00117 |
| 40 | 0.2 | 5 | 120 | 0.00703 |
| 60 | 0.3 | 11 | 340 | 0.0199 |
| 80 | 0.4 | 19 | 720 | 0.04215 |
| 100 | 0.5 | 29 | 1300 | 0.07611 |
| 120 | 0.6 | 41 | 2120 | 0.12411 |
| 140 | 0.7 | 55 | 3220 | 0.18851 |
| 160 | 1 | 75 | 4720 | 0.27633 |
| 180 | 1.4 | 103 | 6780 | 0.39693 |
| 200 | 1.7 | 137 | 9520 | 0.55734 |
| 220 | 2.1 | 179 | 13100 | 0.76692 |
| 230 | 2.2 | 201 | 15110 | 0.8846 |
| 240 | 2.6 | 227 | 17380 | 1.01749 |
| 250 | 3 | 257 | 19950 | 1.16795 |
| 260 | 3.4 | 291 | 22860 | 1.33831 |
| 265 | 3.6 | 309 | 24405 | 1.42876 |
| 270 | 3.7 | 327.5 | 26042.5 | 1.52462 |
| 275 | 4 | 347.5 | 27780 | 1.62634 |
| 280 | 4.1 | 368 | 29620 | 1.73406 |
| 285 | 4.4 | 390 | 31570 | 1.84822 |
| 290 | 4.5 | 412.5 | 33632.5 | 1.96897 |
| 295 | 4.6 | 435.5 | 35810 | 2.09645 |
| 300 | 4.7 | 459 | 38105 | 2.23081 |
| 305 | 4.8 | 483 | 40520 | 2.37219 |
| 310 | 4.8 | 507 | 43055 | 2.5206 |
| 315 | 4.8 | 531 | 45710 | 2.67603 |
| 320 | 4.8 | 555 | 48485 | 2.83849 |
| 325 | 4.8 | 579 | 51380 | 3.00798 |
| 330 | 4.8 | 603 | 54395 | 3.18448 |
| 335 | 4.8 | 627 | 57530 | 3.36802 |
| 340 | 4.7 | 650.5 | 60782.5 | 3.55843 |
| 345 | 4.6 | 673.5 | 64150 | 3.75558 |
| 350 | 4.5 | 696 | 67630 | 3.95931 |
| 355 | 4.4 | 718 | 71220 | 4.16948 |
| 360 | 4.1 | 738.5 | 74912.5 | 4.38565 |
| 365 | 4 | 758.5 | 78705 | 4.60768 |
| 370 | 3.7 | 777 | 82590 | 4.83512 |
| 375 | 3.6 | 795 | 86565 | 5.06784 |
| 380 | 3.4 | 812 | 90625 | 5.30552 |
| 390 | 3 | 842 | 99045 | 5.79846 |
| 400 | 2.6 | 868 | 107725 | 6.30662 |
| 410 | 2.2 | 890 | 116625 | 6.82766 |
| 420 | 2.1 | 911 | 125735 | 7.36099 |
| 440 | 1.7 | 945 | 144635 | 8.46747 |
| 460 | 1.4 | 973 | 164095 | 9.60673 |
| 480 | 1 | 993 | 183955 | 10.7694 |
| 500 | 0.7 | 1007 | 204095 | 11.9485 |
| 520 | 0.6 | 1019 | 224475 | 13.1416 |
| 540 | 0.5 | 1029 | 245055 | 14.3464 |
| 560 | 0.4 | 1037 | 265795 | 15.5606 |
| 580 | 0.3 | 1043 | 286655 | 16.7818 |
| 600 | 0.2 | 1047 | 307595 | 18.0077 |
| 620 | 0.1 | 1049 | 328575 | 19.236 |
| 640 | 0 | 1049 | 349555 | 20.4642 |
| | mrad/A | 15.3531 | | |



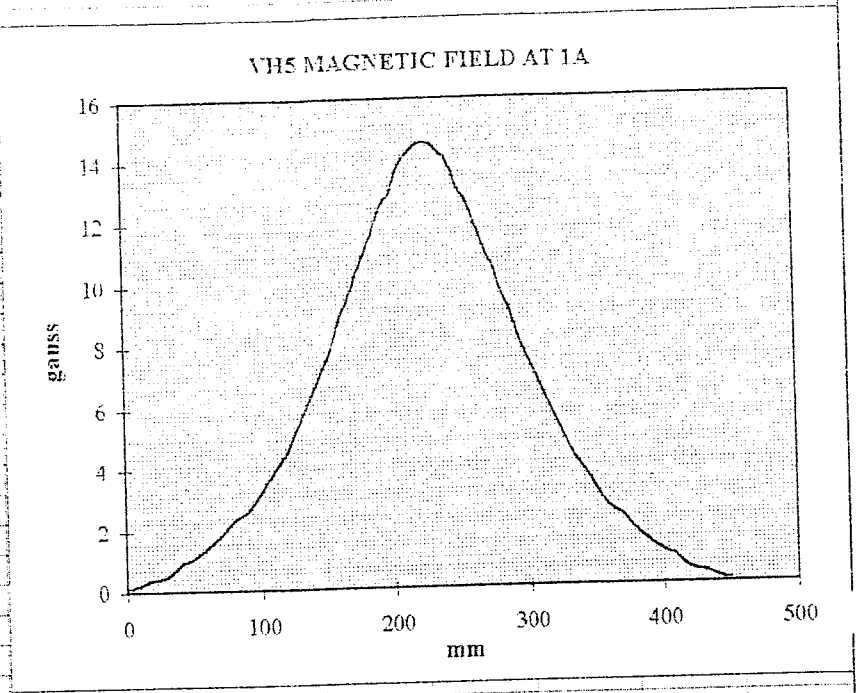



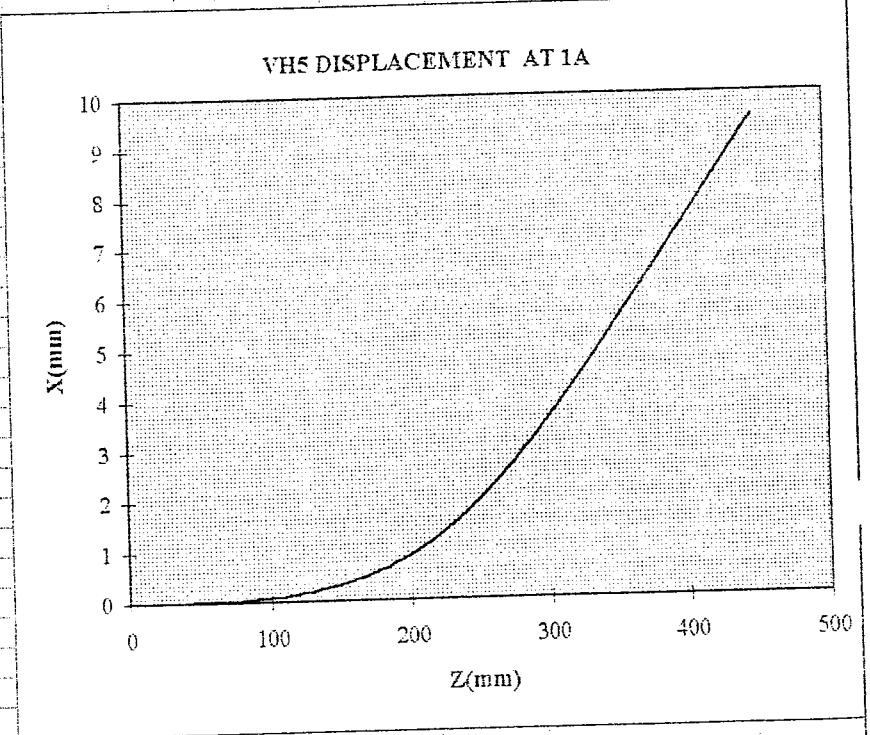
| Z(mm) | By(gauss) | | | 1st.int. | 2nd.int. | 2nd.int.*K |
|---|---|---|---|---|---|---|
| | 1A | 1A(@) | | | | |
| 0 | 0.16 | 0.35 | 0.19 | 1.9 | 19 | 0.000309 |
| 20 | 0.26 | 1.1 | 0.84 | 18.7 | 393 | 0.006385 |
| 40 | 0.36 | 1.9 | 1.54 | 49.5 | 1383 | 0.022468 |
| 45 | 0.38 | 2.08 | 1.7 | 58 | 1673 | 0.02718 |
| 50 | 0.39 | 2.31 | 1.92 | 67.6 | 2011 | 0.032671 |
| 55 | 0.41 | 2.56 | 2.15 | 78.35 | 2402.75 | 0.039035 |
| 60 | 0.43 | 2.85 | 2.42 | 90.45 | 2855 | 0.046383 |
| 65 | 0.46 | 3.17 | 2.71 | 104 | 3375 | 0.054831 |
| 70 | 0.48 | 3.53 | 3.05 | 119.25 | 3971.25 | 0.064517 |
| 75 | 0.52 | 3.95 | 3.43 | 136.4 | 4653.25 | 0.075597 |
| 80 | 0.55 | 4.41 | 3.86 | 155.7 | 5431.75 | 0.088245 |
| 85 | 0.59 | 4.92 | 4.33 | 177.35 | 6318.5 | 0.102651 |
| 90 | 0.63 | 5.54 | 4.91 | 201.9 | 7328 | 0.119051 |
| 95 | 0.68 | 6.19 | 5.51 | 229.45 | 8475.25 | 0.13769 |
| 100 | 0.74 | 6.86 | 6.12 | 260.05 | 9775.5 | 0.158814 |
| 105 | 0.8 | 7.63 | 6.83 | 294.2 | 11246.5 | 0.182712 |
| 110 | 0.86 | 8.47 | 7.61 | 332.25 | 12907.75 | 0.209701 |
| 115 | 0.9 | 9.33 | 8.43 | 374.4 | 14779.75 | 0.240113 |
| 120 | 0.98 | 10.18 | 9.2 | 420.4 | 16881.75 | 0.274263 |
| 25 | 1.05 | 11.02 | 9.97 | 470.25 | 19233 | 0.312461 |
| 130 | 1.13 | 11.8 | 10.67 | 523.6 | 21851 | 0.354994 |
| 135 | 1.18 | 12.5 | -11.32 | 580.2 | 24752 | 0.402123 |
| 140 | 1.23 | 13.06 | 11.83 | 639.35 | 27948.75 | 0.454058 |
| 145 | 1.25 | 13.39 | 12.14 | 700.05 | 31449 | 0.510924 |
| 150 | 1.26 | 13.5 | 12.24 | 761.25 | 35255.25 | 0.57276 |
| 155 | 1.25 | 13.15 | 11.9 | 820.75 | 39359 | 0.63943 |
| 160 | 1.23 | 12.72 | 11.49 | 878.2 | 43750 | 0.710767 |
| 165 | 1.18 | 12.13 | 10.95 | 932.95 | 48414.75 | 0.786551 |
| 170 | 1.13 | 11.56 | 10.43 | 985.1 | 53340.25 | 0.866571 |
| 175 | 1.05 | 10.95 | 9.9 | 1034.6 | 58513.25 | 0.950612 |
| 180 | 0.96 | 9.99 | 9.03 | 1079.75 | 63912 | 1.038321 |
| 185 | 0.9 | 9.1 | 8.2 | 1120.75 | 69515.75 | 1.12936 |
| 190 | 0.86 | 8.27 | 7.41 | 1157.8 | 75304.75 | 1.223408 |
| 195 | 0.8 | 7.48 | 6.68 | 1191.2 | 81260.75 | 1.32017 |
| 200 | 0.74 | 6.71 | 5.97 | 1221.05 | 87366 | 1.419357 |
| 205 | 0.68 | 6.02 | 5.34 | 1247.75 | 93604.75 | 1.520712 |
| 210 | 0.63 | 5.37 | 4.74 | 1271.45 | 99962 | 1.623993 |
| 215 | 0.59 | 4.82 | 4.23 | 1292.6 | 106425 | 1.728991 |
| 220 | 0.55 | 4.33 | 3.78 | 1311.5 | 112982.5 | 1.835525 |
| 25 | 0.515 | 3.9 | 3.385 | 1328.425 | 119624.6 | 1.943434 |
| 230 | 0.48 | 3.51 | 3.03 | 1343.575 | 126342.5 | 2.052573 |
| 235 | 0.46 | 3.17 | 2.71 | 1357.125 | 133128.1 | 2.162813 |
| 240 | 0.43 | 2.86 | 2.43 | 1369.275 | 139974.5 | 2.27404 |
| 245 | 0.41 | 2.59 | 2.18 | 1380.175 | 146875.4 | 2.386152 |
| 250 | 0.39 | 2.35 | 1.96 | 1389.975 | 153825.3 | 2.49906 |
| 255 | 0.38 | 2.13 | 1.75 | 1398.725 | 160818.9 | 2.61268 |
| 260 | 0.36 | 1.95 | 1.59 | 1406.675 | 167852.3 | 2.726944 |
| 280 | 0.26 | 1.1 | 0.84 | 1423.475 | 196321.8 | 3.189463 |
| 300 | 0.16 | 0.35 | 0.19 | 1427.275 | 224867.3 | 3.653216 |
| | | | mrad/A | 23.18765 | | |



| X=Y=0 | Bx | 1st.int. | 2nd.int. | 2nd.int* |
|---|---|---|---|---|
| Z(mm) | gauss | | | 1.62E-05 |
| 0 | 0.1 | 0.5 | 2.5 | 4.06E-05 |
| 10 | 0.2 | 2.5 | 27.5 | 0.000447 |
| 20 | 0.4 | 6.5 | 92.5 | 0.001503 |
| 30 | 0.5 | 11.5 | 207.5 | 0.003371 |
| 40 | 0.9 | 20.5 | 412.5 | 0.006702 |
| 50 | 1.1 | 31.5 | 727.5 | 0.011819 |
| 60 | 1.4 | 45.5 | 1182.5 | 0.019211 |
| 70 | 1.8 | 63.5 | 1817.5 | 0.029527 |
| 80 | 2.3 | 86.5 | 2682.5 | 0.04358 |
| 90 | 2.6 | 112.5 | 3807.5 | 0.061857 |
| 100 | 3.2 | 144.5 | 5252.5 | 0.085333 |
| 110 | 3.9 | 183.5 | 7087.5 | 0.115144 |
| 120 | 4.6 | 229.5 | 9382.5 | 0.152429 |
| 130 | 5.6 | 285.5 | 12237.5 | 0.198812 |
| 140 | 6.5 | 350.5 | 15742.5 | 0.255754 |
| 150 | 7.5 | 425.5 | 19997.5 | 0.324881 |
| 155 | 8 | 465.5 | 22325 | 0.362694 |
| 160 | 8.7 | 509 | 24870 | 0.404041 |
| 165 | 9.3 | 555.5 | 27647.5 | 0.449164 |
| 170 | 9.8 | 604.5 | 30670 | 0.498268 |
| 175 | 10.5 | 657 | 33955 | 0.551636 |
| 180 | 11 | 712 | 37515 | 0.609472 |
| 185 | 11.6 | 770 | 41365 | 0.67202 |
| 190 | 12.2 | 831 | 45520 | 0.739522 |
| 195 | 12.7 | 894.5 | 49992.5 | 0.812183 |
| 200 | 13 | 959.5 | 54790 | 0.890124 |
| 205 | 13.7 | 1028 | 59930 | 0.973629 |
| 210 | 14.1 | 1098.5 | 65422.5 | 1.06286 |
| 215 | 14.3 | 1170 | 71272.5 | 1.1579 |
| 220 | 14.5 | 1242.5 | 77485 | 1.258829 |
| 225 | 14.6 | 1315.5 | 84062.5 | 1.365688 |
| 230 | 14.5 | 1388 | 91002.5 | 1.478436 |
| 235 | 14.3 | 1459.5 | 98300 | 1.596992 |
| 240 | 14.1 | 1530 | 105950 | 1.721274 |
| 245 | 13.7 | 1598.5 | 113942.5 | 1.851121 |
| 250 | 13 | 1663.5 | 122260 | 1.986248 |
| 255 | 12.7 | 1727 | 130895 | 2.126533 |
| 260 | 12.2 | 1788 | 139835 | 2.271773 |
| 265 | 11.6 | 1846 | 149065 | 2.421725 |
| 270 | 11 | 1901 | 158570 | 2.576144 |
| 275 | 10.5 | 1953.5 | 168337.5 | 2.734828 |
| 280 | 9.8 | 2002.5 | 178350 | 2.897492 |
| 285 | 9.3 | 2049 | 188595 | 3.063933 |
| 290 | 8.7 | 2092.5 | 199057.5 | 3.233908 |
| 295 | 8 | 2132.5 | 209720 | 3.407132 |
| 300 | 7.5 | 2170 | 220570 | 3.583402 |
| 310 | 6.5 | 2235 | 242920 | 3.946503 |
| 320 | 5.6 | 2291 | 265830 | 4.318701 |
| 330 | 4.6 | 2337 | 289200 | 4.698372 |
| 340 | 3.9 | 2376 | 312960 | 5.084379 |
| 350 | 3.2 | 2408 | 337040 | 5.475586 |
| 360 | 2.6 | 2434 | 361380 | 5.871016 |
| 370 | 2.3 | 2457 | 385950 | 6.270182 |
| 380 | 1.8 | 2475 | 410700 | 6.672273 |
| 390 | 1.4 | 2489 | 435590 | 7.076639 |
| 400 | 1.1 | 2500 | 460590 | 7.482791 |
| 410 | 0.9 | 2509 | 485680 | 7.890406 |
| 420 | 0.5 | 2514 | 510820 | 8.298833 |
| 430 | 0.4 | 2518 | 536000 | 8.70791 |
| 440 | 0.2 | 2520 | 561200 | 9.117311 |
| 450 | 0.1 | 2521 | 586410 | 9.526876 |
| | | 40.95642 | | |



| Z(mm) | | By(gauss) | | | | 1st.Int. | 2nd.Int. | 2nd.Int. |
|---|---|---|---|---|---|---|---|---|
| | | 2A | 0 | 2A | 2A(ave) | | | *1.6E-5 |
| -260 | 0 | 0.4 | -0.2 | 0.4 | 0.6 | 6 | 60 | 0.000978 |
| -240 | 20 | 0.5 | -0.2 | 0.5 | 0.7 | 20 | 460 | 0.007498 |
| -220 | 40 | 0.7 | -0.2 | 0.7 | 0.9 | 38 | 1220 | 0.019886 |
| -200 | 60 | 0.9 | -0.2 | 0.9 | 1.1 | 60 | 2420 | 0.039446 |
| -180 | 80 | 1.2 | -0.1 | 1.3 | 1.35 | 87 | 4160 | 0.067808 |
| -160 | 100 | 1.7 | -0.1 | 1.7 | 1.8 | 123 | 6620 | 0.107906 |
| -140 | 120 | 1.9 | -0.1 | 1.9 | 2 | 163 | 9880 | 0.161044 |
| -130 | 130 | 2.2 | -0.1 | 2.2 | 2.3 | 186 | 11740 | 0.191362 |
| -120 | 140 | 2.5 | -0.1 | 2.5 | 2.6 | 212 | 13860 | 0.225918 |
| -110 | 150 | 2.9 | 0 | 2.8 | 2.85 | 240.5 | 16265 | 0.26512 |
| -100 | 160 | 3.2 | 0 | 3.2 | 3.2 | 272.5 | 18990 | 0.309537 |
| -90 | 170 | 3.8 | 0.2 | 3.7 | 3.55 | 308 | 22070 | 0.359741 |
| -80 | 180 | 4.3 | 0.2 | 4.3 | 4.1 | 349 | 25560 | 0.416628 |
| -70 | 190 | 4.9 | 0.2 | 4.9 | 4.7 | 396 | 29520 | 0.481176 |
| -60 | 200 | 5.5 | 0.3 | 5.4 | 5.15 | 447.5 | 33995 | 0.554119 |
| -50 | 210 | 6.2 | 0.4 | 6.2 | 5.8 | 505.5 | 39050 | 0.636515 |
| -45 | 215 | 6.8 | 0.5 | 6.7 | 6.25 | 536.75 | 41733.75 | 0.68026 |
| -40 | 220 | 7.2 | 0.5 | 7.1 | 6.65 | 570 | 44583.75 | 0.726715 |
| -35 | 225 | 7.4 | 0.5 | 7.4 | 6.9 | 604.5 | 47606.25 | 0.775982 |
| -30 | 230 | 7.7 | 0.6 | 7.6 | 7.05 | 639.75 | 50805 | 0.828122 |
| -25 | 235 | 7.9 | 0.6 | 7.8 | 7.25 | 676 | 54185 | 0.883216 |
| -20 | 240 | 8.1 | 0.6 | 8 | 7.45 | 713.25 | 57751.25 | 0.941345 |
| -15 | 245 | 8.2 | 0.6 | 8.1 | 7.55 | 751 | 61506.25 | 1.002552 |
| -10 | 250 | 8.3 | 0.7 | 8.2 | 7.55 | 788.75 | 65450 | 1.066835 |
| -5 | 255 | 8.4 | 0.7 | 8.4 | 7.7 | 827.25 | 69586.25 | 1.134256 |
| 0 | 260 | 8.4 | 0.7 | 8.4 | 7.7 | 865.75 | 73915 | 1.204815 |
| 5 | 265 | 8.4 | 0.7 | 8.4 | 7.7 | 904.25 | 78436.25 | 1.278511 |
| 10 | 270 | 8.3 | 0.7 | 8.2 | 7.55 | 942 | 83146.25 | 1.355284 |
| 15 | 275 | 8.2 | 0.7 | 8.1 | 7.45 | 979.25 | 88042.5 | 1.435093 |
| 20 | 280 | 8.1 | 0.6 | 8 | 7.45 | 1016.5 | 93125 | 1.517938 |
| 25 | 285 | 7.9 | 0.6 | 7.8 | 7.25 | 1052.75 | 98388.75 | 1.603737 |
| 30 | 290 | 7.7 | 0.6 | 7.6 | 7.05 | 1088 | 103828.8 | 1.692409 |
| 35 | 295 | 7.4 | 0.5 | 7.4 | 6.9 | 1122.5 | 109441.3 | 1.783892 |
| 40 | 300 | 7.2 | 0.5 | 7.1 | 6.65 | 1155.75 | 115220 | 1.878086 |
| 45 | 305 | 6.8 | 0.5 | 6.7 | 6.25 | 1187 | 121155 | 1.974827 |
| 50 | 310 | 6.2 | 0.4 | 6.2 | 5.8 | 1216 | 127235 | 2.073931 |
| 60 | 320 | 5.5 | 0.3 | 5.4 | 5.15 | 1267.5 | 139910 | 2.280533 |
| 70 | 330 | 4.9 | 0.2 | 4.9 | 4.7 | 1314.5 | 153055 | 2.494797 |
| 80 | 340 | 4.3 | 0.2 | 4.3 | 4.1 | 1355.5 | 166610 | 2.715743 |
| 90 | 350 | 3.8 | 0.2 | 3.7 | 3.55 | 1391 | 180520 | 2.942476 |
| 100 | 360 | 3.2 | 0 | 3.2 | 3.2 | 1423 | 194750 | 3.174425 |
| 110 | 370 | 2.9 | 0 | 2.8 | 2.85 | 1451.5 | 209265 | 3.41102 |
| 120 | 380 | 2.5 | -0.1 | 2.5 | 2.6 | 1477.5 | 224040 | 3.651852 |
| 130 | 390 | 2.2 | -0.1 | 2.2 | 2.3 | 1500.5 | 239045 | 3.896434 |
| 140 | 400 | 1.9 | -0.1 | 1.9 | 2 | 1520.5 | 254250 | 4.144275 |
| 160 | 420 | 1.7 | -0.1 | 1.7 | 1.8 | 1556.5 | 285380 | 4.651694 |
| 180 | 440 | 1.2 | -0.1 | 1.3 | 1.35 | 1583.5 | 317050 | 5.167915 |
| 200 | 460 | 0.9 | -0.2 | 0.9 | 1.1 | 1605.5 | 349160 | 5.691308 |
| 220 | 480 | 0.7 | -0.2 | 0.7 | 0.9 | 1623.5 | 381630 | 6.220569 |
| 240 | 500 | 0.5 | -0.2 | 0.5 | 0.7 | 1637.5 | 414380 | 6.754394 |
| 260 | 520 | 0.4 | -0.2 | 0.4 | 0.6 | 1649.5 | 447370 | 7.292131 |
| | | | | | mrad/A | 13.39897 | | |