

Type K Thermocouple Table

Nickel-Chromium/Nickel-Aluminium, Electromotive Force as a function of temperature, E/ μ V
As per Standard ASTM E231

| t90/°C | 0 | -1 | -2 | -3 | -4 | -5 | -6 | -7 | -8 | -9 | t90/°C |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| -270 | -6458 | | | | | | | | | | -270 |
| -260 | -6441 | -6444 | -6446 | -6448 | -6450 | -5452 | -6453 | -6455 | -6456 | -6457 | -260 |
| -250 | -6404 | -6408 | -6413 | -6417 | -6421 | -5425 | -6429 | -6432 | -6435 | -6438 | -250 |
| -240 | -6344 | -6351 | -6358 | -6364 | -6370 | -6377 | -6382 | -6388 | -6393 | -6399 | -240 |
| -230 | -6262 | -6271 | -6280 | -6289 | -6297 | -6306 | -6314 | -6322 | -6329 | -6337 | -230 |
| -220 | -6158 | -6170 | -6181 | -6192 | -6202 | -6213 | -6223 | -6233 | -6243 | -6252 | -220 |
| -210 | -6035 | -6048 | -6061 | -6074 | -6087 | -6099 | -6111 | -6123 | -6135 | -6147 | -210 |
| -200 | -5891 | -5907 | -5922 | -5936 | -5951 | -5965 | -5980 | -5994 | -6007 | -6021 | -200 |
| -190 | -5730 | -5747 | -5763 | -5780 | -5797 | -5813 | -5829 | -5845 | -5861 | -5876 | -190 |
| -180 | -5550 | -5569 | -5588 | -5606 | -5624 | -5642 | -5660 | -5678 | -5695 | -5713 | -180 |
| -170 | -5354 | -5374 | -5395 | -5415 | -5435 | -5454 | -5474 | -5493 | -5512 | -5531 | -170 |
| -160 | -5141 | -5163 | -5185 | -5207 | -5228 | -5250 | -5271 | -5292 | -5313 | -5333 | -160 |
| -150 | -4913 | -4936 | -4960 | -4983 | -5006 | -5029 | -5052 | -5074 | -5097 | -5119 | -150 |
| -140 | -4669 | -4694 | -4719 | -4744 | -4768 | -4793 | -4817 | -4841 | -4865 | -4889 | -140 |
| -130 | -4411 | -4437 | -4463 | -4490 | -4516 | -4542 | -4567 | -4593 | -4618 | -4644 | -130 |
| -120 | -4138 | -4166 | -4194 | -4221 | -4249 | -4276 | -4303 | -4330 | -4357 | -4384 | -120 |
| -110 | -3852 | -3882 | -3911 | -3939 | -3968 | -3997 | -4025 | -4054 | -4082 | -4110 | -110 |
| -100 | -3554 | -3584 | -3614 | -3645 | -3675 | -3705 | -3734 | -3764 | -3794 | -3823 | -100 |
| -90 | -3243 | -3274 | -3306 | -3337 | -3368 | -3400 | -3431 | -3462 | -3492 | -3523 | -90 |
| -80 | -2920 | -2953 | -2986 | -3018 | -3050 | -3083 | -3115 | -3147 | -3179 | -3211 | -80 |
| -70 | -2587 | -2620 | -2654 | -2688 | -2721 | -2755 | -2788 | -2821 | -2854 | -2887 | -70 |
| -60 | -2243 | -2278 | -2312 | -2347 | -2382 | -2416 | -2450 | -2485 | -2519 | -2553 | -60 |
| -50 | -1889 | -1925 | -1961 | -1996 | -2032 | -2067 | -2103 | -2138 | -2173 | -2208 | -50 |
| -40 | -1527 | -1564 | -1600 | -1637 | -1673 | -1709 | -1745 | -1782 | -1818 | -1854 | -40 |
| -30 | -1156 | -1194 | -1231 | -1268 | -1305 | -1343 | -1380 | -1417 | -1453 | -1490 | -30 |
| -20 | -778 | -816 | -854 | -892 | -930 | -968 | -1006 | -1043 | -1081 | -1119 | -20 |
| -10 | -392 | -431 | -470 | -508 | -547 | -586 | -624 | -663 | -701 | -739 | -10 |
| 0 | 0 | -39 | -79 | -118 | -157 | -197 | -236 | -275 | -314 | -353 | 0 |
| t90/°C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | t90/°C |
| 0 | 0 | 39 | 79 | 119 | 158 | 198 | 238 | 277 | 317 | 357 | 0 |
| 10 | 397 | 437 | 477 | 517 | 557 | 597 | 637 | 677 | 718 | 758 | 10 |
| 20 | 798 | 838 | 879 | 919 | 960 | 1000 | 1041 | 1081 | 1122 | 1163 | 20 |
| 30 | 1203 | 1244 | 1285 | 1326 | 1366 | 1407 | 1448 | 1489 | 1530 | 1571 | 30 |
| 40 | 1612 | 1653 | 1694 | 1735 | 1776 | 1817 | 1858 | 1899 | 1941 | 1982 | 40 |
| 50 | 2023 | 2064 | 2106 | 2147 | 2188 | 2230 | 2271 | 2312 | 2354 | 2397 | 50 |
| 60 | 2436 | 2478 | 2519 | 2561 | 2602 | 2644 | 2685 | 2727 | 2768 | 2810 | 60 |
| 70 | 2851 | 2893 | 2934 | 2976 | 3017 | 3059 | 3100 | 3142 | 3184 | 3225 | 70 |
| 80 | 3267 | 3308 | 3350 | 3391 | 3433 | 3474 | 3516 | 3557 | 3599 | 3640 | 80 |
| 90 | 3682 | 3723 | 3765 | 3806 | 3848 | 3889 | 3931 | 3972 | 4013 | 4055 | 90 |
| 100 | 4096 | 4138 | 4179 | 4220 | 4262 | 4303 | 4344 | 4385 | 4427 | 4468 | 100 |
| 110 | 4509 | 4550 | 4561 | 4633 | 4674 | 4715 | 4756 | 4797 | 4838 | 4879 | 110 |
| 120 | 4920 | 4961 | 5002 | 5043 | 5084 | 5124 | 5165 | 5206 | 5247 | 5288 | 120 |
| 130 | 5328 | 5369 | 5410 | 5450 | 5491 | 5532 | 5572 | 5613 | 5653 | 5694 | 130 |
| 140 | 5735 | 5775 | 5815 | 5856 | 5896 | 5937 | 5977 | 6017 | 6058 | 6098 | 140 |
| 150 | 6138 | 6179 | 6219 | 6259 | 6299 | 6339 | 6380 | 6420 | 6460 | 6500 | 150 |
| 160 | 6540 | 6580 | 6620 | 6660 | 6701 | 6741 | 6781 | 6821 | 6861 | 6901 | 160 |
| 170 | 6941 | 6981 | 7020 | 7060 | 7100 | 7140 | 7180 | 7220 | 7260 | 7300 | 170 |
| 180 | 7340 | 7380 | 7420 | 7460 | 7500 | 7540 | 7579 | 7619 | 7659 | 7699 | 180 |
| 190 | 7739 | 7779 | 7820 | 7859 | 7899 | 7939 | 7979 | 8019 | 8059 | 8099 | 190 |
| 200 | 8138 | 8178 | 8219 | 8258 | 8298 | 8338 | 8378 | 8418 | 8458 | 8499 | 200 |
| 210 | 8539 | 8579 | 8619 | 8659 | 8699 | 8739 | 8779 | 8819 | 8860 | 8900 | 210 |
| 220 | 8940 | 8980 | 9020 | 9061 | 9101 | 9141 | 9181 | 9222 | 9262 | 9302 | 220 |
| 230 | 9343 | 9383 | 9420 | 9464 | 9504 | 9545 | 9585 | 9626 | 9666 | 9707 | 230 |
| 240 | 9747 | 9788 | 9828 | 9869 | 9909 | 9950 | 9991 | 10031 | 10072 | 10113 | 240 |
| 250 | 10153 | 10194 | 10235 | 10276 | 10316 | 10357 | 10398 | 10439 | 10480 | 10520 | 250 |
| 260 | 10561 | 10602 | 10643 | 10684 | 10725 | 10766 | 10807 | 10848 | 10889 | 10930 | 260 |
| 270 | 10971 | 11012 | 11053 | 11094 | 11135 | 11176 | 11217 | 11259 | 11300 | 11341 | 270 |
| 280 | 11382 | 11423 | 11465 | 11506 | 11547 | 11588 | 11630 | 11671 | 11712 | 11753 | 280 |

Type K Thermocouple Table

**Nickel-Chromium/Nickel-Aluminium, Electromotive Force as a function of temperature, E/ μ V
As per Standard ASTM E231**

| t90/°C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | t90/°C |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| 290 | 11795 | 11836 | 11877 | 11919 | 11960 | 12001 | 12043 | 12084 | 12126 | 12167 | 290 |
| 300 | 12209 | 12250 | 12291 | 12333 | 12374 | 12416 | 12457 | 12499 | 12540 | 12582 | 300 |
| 310 | 12624 | 12665 | 12707 | 12748 | 12790 | 12831 | 12873 | 12915 | 12956 | 12998 | 310 |
| 320 | 13040 | 13081 | 13123 | 13165 | 13206 | 13248 | 13290 | 13331 | 13373 | 13415 | 320 |
| 330 | 13457 | 13498 | 13540 | 13582 | 13624 | 13665 | 13707 | 13749 | 13791 | 13833 | 330 |
| 340 | 13874 | 13916 | 13958 | 14000 | 14042 | 14084 | 14126 | 14167 | 14209 | 14251 | 340 |
| 350 | 14293 | 14335 | 14377 | 14419 | 14461 | 14503 | 14545 | 14587 | 14629 | 14671 | 350 |
| 360 | 14713 | 14755 | 14797 | 14839 | 14881 | 14923 | 14965 | 15007 | 15049 | 15091 | 360 |
| 370 | 15133 | 15175 | 15217 | 15259 | 15301 | 15343 | 15385 | 15427 | 15469 | 15511 | 370 |
| 380 | 15554 | 15596 | 15638 | 15680 | 15722 | 15764 | 15806 | 15849 | 15891 | 15933 | 380 |
| 390 | 15975 | 16017 | 16059 | 16102 | 16144 | 16186 | 16228 | 16270 | 16313 | 16355 | 390 |
| 400 | 16397 | 16439 | 16482 | 16524 | 16566 | 16608 | 16651 | 16693 | 16735 | 16778 | 400 |
| 410 | 16820 | 16862 | 16904 | 16947 | 16989 | 17031 | 17074 | 17116 | 17158 | 17201 | 410 |
| 420 | 17243 | 17285 | 17328 | 17370 | 17413 | 17455 | 17497 | 17540 | 17582 | 17624 | 420 |
| 430 | 17667 | 17709 | 17752 | 17794 | 17837 | 17879 | 17921 | 17964 | 18006 | 18049 | 430 |
| 440 | 18091 | 18134 | 18176 | 18218 | 18261 | 18303 | 18346 | 18388 | 18431 | 18473 | 440 |
| 450 | 18516 | 18558 | 18601 | 18643 | 18686 | 18728 | 18771 | 18813 | 18856 | 18898 | 450 |
| 460 | 18941 | 18983 | 19026 | 19068 | 19111 | 19154 | 19196 | 19239 | 19281 | 19324 | 460 |
| 470 | 19366 | 19409 | 19451 | 19494 | 19537 | 19579 | 19622 | 19664 | 19707 | 19750 | 470 |
| 480 | 19792 | 19835 | 19877 | 19920 | 19962 | 20005 | 20048 | 20090 | 20133 | 20175 | 480 |
| 490 | 20218 | 20261 | 20303 | 20346 | 20389 | 20431 | 20474 | 20516 | 20559 | 20605 | 490 |
| 500 | 20644 | 20687 | 20730 | 20772 | 20815 | 20857 | 20900 | 20943 | 20985 | 21028 | 500 |
| 510 | 21071 | 21113 | 21156 | 21199 | 21241 | 21284 | 21326 | 21369 | 21412 | 21454 | 510 |
| 520 | 21497 | 21540 | 21582 | 21625 | 21668 | 21710 | 21753 | 21796 | 21838 | 21881 | 520 |
| 530 | 21924 | 21966 | 22009 | 22052 | 22094 | 22137 | 22179 | 22222 | 22265 | 22307 | 530 |
| 540 | 22350 | 22393 | 22435 | 22478 | 22521 | 22563 | 22606 | 22649 | 22691 | 22734 | 540 |
| 550 | 22776 | 22819 | 22862 | 22904 | 22947 | 22990 | 23032 | 23075 | 23117 | 23160 | 550 |
| 560 | 23203 | 23245 | 23288 | 23331 | 23373 | 23416 | 23458 | 23501 | 23544 | 23586 | 560 |
| 570 | 23629 | 23671 | 23714 | 23757 | 23799 | 23842 | 23884 | 23927 | 23970 | 24012 | 570 |
| 580 | 24055 | 24097 | 24140 | 24182 | 24225 | 24267 | 24310 | 24353 | 24395 | 24438 | 580 |
| 590 | 24480 | 24523 | 24565 | 24608 | 24650 | 24693 | 24735 | 24778 | 24820 | 24863 | 590 |
| 600 | 24905 | 24948 | 24990 | 25033 | 25075 | 25118 | 25160 | 25203 | 25245 | 25288 | 600 |
| 610 | 25330 | 25373 | 25415 | 25458 | 25500 | 25543 | 25585 | 25627 | 25670 | 25712 | 610 |
| 620 | 25755 | 25797 | 25840 | 25882 | 25924 | 25967 | 26009 | 26052 | 26094 | 26136 | 620 |
| 630 | 26179 | 26221 | 26263 | 26306 | 26348 | 26390 | 26433 | 26475 | 26517 | 26560 | 630 |
| 640 | 26602 | 26644 | 26687 | 26729 | 26771 | 26814 | 26856 | 26898 | 26940 | 26983 | 640 |
| 650 | 27025 | 27067 | 27109 | 27152 | 27194 | 27236 | 27278 | 27320 | 27363 | 27405 | 650 |
| 660 | 27447 | 27489 | 27531 | 27574 | 27616 | 27658 | 27700 | 27742 | 27784 | 27826 | 660 |
| 670 | 27869 | 27911 | 27953 | 27995 | 28037 | 28079 | 28121 | 28163 | 28205 | 28247 | 670 |
| 680 | 28289 | 28332 | 28374 | 28416 | 28458 | 28500 | 28542 | 28584 | 28626 | 28668 | 680 |
| 690 | 28710 | 28752 | 28794 | 28835 | 28877 | 28919 | 28961 | 29003 | 29045 | 29087 | 690 |
| 700 | 29129 | 29171 | 29213 | 29255 | 29297 | 29338 | 29380 | 29422 | 29464 | 29506 | 700 |
| 710 | 29548 | 29589 | 29631 | 29673 | 29715 | 29757 | 29798 | 29840 | 29882 | 29924 | 710 |
| 720 | 29965 | 30007 | 30049 | 30090 | 30132 | 30174 | 30216 | 30257 | 30299 | 30341 | 720 |
| 730 | 30382 | 30424 | 30466 | 30507 | 30549 | 30590 | 30632 | 30674 | 30715 | 30757 | 730 |
| 740 | 30798 | 30840 | 30881 | 30923 | 30964 | 31006 | 31047 | 31089 | 31130 | 31172 | 740 |
| 750 | 31213 | 31255 | 31296 | 31338 | 31379 | 31421 | 31462 | 31504 | 31545 | 31586 | 750 |
| 760 | 31628 | 31669 | 31710 | 31752 | 31793 | 31834 | 31876 | 31917 | 31958 | 32000 | 760 |
| 770 | 32041 | 32082 | 32124 | 32165 | 32206 | 32247 | 32289 | 32330 | 32371 | 32412 | 770 |
| 780 | 32453 | 32495 | 32536 | 32577 | 32618 | 32659 | 32700 | 32742 | 32783 | 32824 | 780 |
| 790 | 32865 | 32906 | 32947 | 32988 | 33029 | 33070 | 33111 | 33152 | 33193 | 33234 | 790 |
| 800 | 33275 | 33316 | 33357 | 33398 | 33439 | 33480 | 33521 | 33562 | 33603 | 33644 | 800 |
| 810 | 33685 | 33726 | 33767 | 33808 | 33848 | 33889 | 33930 | 33971 | 34012 | 34053 | 810 |
| 820 | 34093 | 34134 | 34175 | 34216 | 34257 | 34297 | 34338 | 34379 | 34420 | 34460 | 820 |
| 830 | 34501 | 34542 | 34582 | 34623 | 34664 | 34704 | 34745 | 34786 | 34826 | 34867 | 830 |
| 840 | 34908 | 34948 | 34989 | 35029 | 35070 | 35110 | 35151 | 35192 | 35232 | 35273 | 840 |
| 850 | 35313 | 35354 | 35394 | 35435 | 35475 | 35516 | 35556 | 35596 | 35637 | 35677 | 850 |
| 860 | 35718 | 35758 | 35798 | 35839 | 35879 | 35920 | 35960 | 36000 | 36041 | 36081 | 860 |
| 870 | 36121 | 36162 | 36202 | 36242 | 36282 | 36323 | 36363 | 36403 | 36443 | 36484 | 870 |

Type K Thermocouple Table

Nickel-Chromium/Nickel-Aluminium, Electromotive Force as a function of temperature, E/ μ V
As per Standard ASTM E231

| t90/°C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | t90/°C |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 880 | 36524 | 36564 | 36604 | 36644 | 36685 | 36725 | 36765 | 36805 | 36845 | 36885 | 880 |
| 890 | 36925 | 36965 | 37006 | 37046 | 37086 | 37125 | 37166 | 37206 | 37246 | 37286 | 890 |
| 900 | 37326 | 37366 | 37406 | 37446 | 37486 | 37526 | 37566 | 37606 | 37646 | 37686 | 900 |
| 910 | 37725 | 37765 | 37805 | 37845 | 37885 | 37925 | 37965 | 38005 | 38044 | 38084 | 910 |
| 920 | 38124 | 38164 | 38204 | 38243 | 38283 | 38323 | 38363 | 38402 | 38442 | 38482 | 920 |
| 930 | 38522 | 38561 | 38601 | 38641 | 38680 | 38720 | 38760 | 38799 | 38839 | 38878 | 930 |
| 940 | 38918 | 38958 | 38997 | 39037 | 39076 | 39116 | 39155 | 39195 | 39235 | 39274 | 940 |
| 950 | 39314 | 39353 | 39393 | 39432 | 39471 | 39511 | 39550 | 39590 | 39629 | 39669 | 950 |
| 960 | 39708 | 39747 | 39787 | 39826 | 39866 | 39905 | 39944 | 39984 | 40023 | 40062 | 960 |
| 970 | 40101 | 40141 | 40180 | 40219 | 40259 | 40298 | 40337 | 40376 | 40415 | 40455 | 970 |
| 980 | 40494 | 40533 | 40572 | 40611 | 40651 | 40690 | 40729 | 40768 | 40807 | 40846 | 980 |
| 990 | 40885 | 40924 | 40963 | 41002 | 41042 | 41081 | 41120 | 41156 | 41198 | 41237 | 990 |
| 1000 | 41276 | 41315 | 41354 | 41393 | 41431 | 41470 | 41509 | 41548 | 41587 | 41626 | 1000 |
| 1010 | 41665 | 41704 | 41743 | 41781 | 41820 | 41859 | 41898 | 41937 | 41976 | 42014 | 1010 |
| 1020 | 42053 | 42092 | 42131 | 42169 | 42208 | 42247 | 42286 | 42324 | 42363 | 42402 | 1020 |
| 1030 | 42440 | 42479 | 42518 | 42556 | 42595 | 42633 | 42672 | 42711 | 42749 | 42788 | 1030 |
| 1040 | 42826 | 42865 | 42903 | 42942 | 42980 | 43019 | 43057 | 43096 | 43134 | 43173 | 1040 |
| 1050 | 43211 | 43250 | 43288 | 43327 | 43365 | 43403 | 43442 | 43480 | 43518 | 43557 | 1050 |
| 1060 | 43595 | 43633 | 43672 | 43710 | 43748 | 43787 | 43825 | 43863 | 43901 | 43940 | 1060 |
| 1070 | 43978 | 44016 | 44054 | 44092 | 44130 | 44169 | 44207 | 44245 | 44283 | 44321 | 1070 |
| 1080 | 44359 | 44397 | 44435 | 44473 | 44512 | 44550 | 44588 | 44626 | 44664 | 44702 | 1080 |
| 1090 | 44740 | 44778 | 44816 | 44853 | 44891 | 44929 | 44967 | 45005 | 45043 | 45081 | 1090 |
| 1100 | 45119 | 45157 | 45194 | 45232 | 45270 | 45308 | 45346 | 45383 | 45421 | 45459 | 1100 |
| 1110 | 45497 | 45534 | 45572 | 45610 | 45647 | 45685 | 45723 | 45760 | 45798 | 45836 | 1110 |
| 1120 | 45873 | 45911 | 45948 | 45986 | 46024 | 46061 | 46099 | 46136 | 46174 | 46211 | 1120 |
| 1130 | 46249 | 46286 | 46324 | 46361 | 46398 | 46436 | 46473 | 46511 | 46548 | 46585 | 1130 |
| 1140 | 46623 | 46660 | 46697 | 46735 | 46772 | 46809 | 46847 | 46884 | 46921 | 46958 | 1140 |
| 1150 | 46995 | 47033 | 47070 | 47107 | 47144 | 47181 | 47218 | 47256 | 47293 | 47330 | 1150 |
| 1160 | 47367 | 47404 | 47441 | 47478 | 47515 | 47552 | 47589 | 47626 | 47663 | 47700 | 1160 |
| 1170 | 47737 | 47774 | 47811 | 47848 | 47884 | 47921 | 47958 | 47995 | 48032 | 48069 | 1170 |
| 1180 | 48105 | 48142 | 48179 | 48216 | 48252 | 48289 | 48326 | 48363 | 48399 | 48436 | 1180 |
| 1190 | 48473 | 48509 | 48546 | 48582 | 48619 | 48656 | 48692 | 48729 | 48765 | 48802 | 1190 |
| 1200 | 48838 | 48875 | 48911 | 48948 | 48984 | 49021 | 49057 | 49093 | 49130 | 49166 | 1200 |
| 1210 | 49202 | 49239 | 49275 | 49311 | 49348 | 49384 | 49420 | 49456 | 49493 | 49529 | 1210 |
| 1220 | 49565 | 49601 | 49637 | 49674 | 49710 | 49746 | 49782 | 49818 | 49854 | 49890 | 1220 |
| 1230 | 49926 | 49962 | 49998 | 50034 | 50070 | 50106 | 50142 | 50178 | 50214 | 50250 | 1230 |
| 1240 | 50286 | 50322 | 50358 | 50393 | 50429 | 50465 | 50501 | 50537 | 50572 | 50608 | 1240 |
| 1250 | 50644 | 50680 | 50715 | 50751 | 50787 | 50822 | 50858 | 50894 | 50929 | 50965 | 1250 |
| 1260 | 51000 | 51036 | 51071 | 51107 | 51142 | 51178 | 51213 | 51249 | 51284 | 51320 | 1260 |
| 1270 | 51355 | 51391 | 51426 | 51461 | 51497 | 51532 | 51567 | 51603 | 51638 | 51673 | 1270 |
| 1280 | 51708 | 51744 | 51779 | 51814 | 51849 | 51885 | 51920 | 51955 | 51990 | 52025 | 1280 |
| 1290 | 52060 | 52095 | 52130 | 52165 | 52200 | 52235 | 52270 | 52305 | 52340 | 52375 | 1290 |
| 1300 | 52410 | 52445 | 52480 | 52516 | 52550 | 52585 | 52620 | 52654 | 52689 | 52724 | 1300 |
| 1310 | 52759 | 52794 | 52828 | 52865 | 52898 | 52932 | 52967 | 53002 | 53037 | 53071 | 1310 |
| 1320 | 53106 | 53140 | 53175 | 53210 | 53244 | 53279 | 53313 | 53348 | 53382 | 53417 | 1320 |
| 1330 | 53451 | 53486 | 53520 | 53555 | 53589 | 53623 | 53658 | 53692 | 53727 | 53761 | 1330 |
| 1340 | 53795 | 53830 | 53864 | 53898 | 53932 | 53967 | 54001 | 54035 | 54069 | 54104 | 1340 |
| 1350 | 54138 | 54172 | 54206 | 54240 | 54274 | 54308 | 54343 | 54377 | 54411 | 54445 | 1350 |
| 1360 | 54479 | 54513 | 54547 | 54581 | 54615 | 54649 | 54683 | 54717 | 54751 | 54785 | 1360 |
| 1370 | 54819 | 54852 | 54886 | | | | | | | | 1370 |