

TABLE 23 Type M Thermocouple— thermoelectric voltage as a function of temperature (°C); reference junctions at 0 °C

| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
| Thermoelectric Voltage in Millivolts | | | | | | | | | | | | |
| -50 | -1.732 | | | | | | | | | | | -50 |
| -40 | -1.404 | -1.437 | -1.470 | -1.503 | -1.536 | -1.569 | -1.602 | -1.634 | -1.667 | -1.699 | -1.732 | -40 |
| -30 | -1.067 | -1.101 | -1.135 | -1.169 | -1.203 | -1.236 | -1.270 | -1.304 | -1.337 | -1.370 | -1.404 | -30 |
| -20 | -0.720 | -0.755 | -0.790 | -0.825 | -0.860 | -0.895 | -0.929 | -0.964 | -0.998 | -1.032 | -1.067 | -20 |
| -10 | -0.365 | -0.401 | -0.436 | -0.472 | -0.508 | -0.543 | -0.579 | -0.614 | -0.650 | -0.685 | -0.720 | -10 |
| 0 | 0.000 | -0.037 | -0.074 | -0.110 | -0.147 | -0.183 | -0.220 | -0.256 | -0.292 | -0.329 | -0.365 | 0 |
| 0 | 0.000 | 0.037 | 0.074 | 0.111 | 0.148 | 0.186 | 0.223 | 0.260 | 0.298 | 0.336 | 0.373 | 0 |
| 10 | 0.373 | 0.411 | 0.449 | 0.487 | 0.525 | 0.563 | 0.602 | 0.640 | 0.678 | 0.717 | 0.755 | 10 |
| 20 | 0.755 | 0.794 | 0.833 | 0.872 | 0.911 | 0.950 | 0.989 | 1.028 | 1.067 | 1.106 | 1.146 | 20 |
| 30 | 1.146 | 1.185 | 1.225 | 1.264 | 1.304 | 1.344 | 1.384 | 1.424 | 1.464 | 1.504 | 1.544 | 30 |
| 40 | 1.544 | 1.585 | 1.625 | 1.665 | 1.706 | 1.747 | 1.787 | 1.828 | 1.869 | 1.910 | 1.951 | 40 |
| 50 | 1.951 | 1.992 | 2.033 | 2.074 | 2.115 | 2.157 | 2.198 | 2.240 | 2.281 | 2.323 | 2.365 | 50 |
| 60 | 2.365 | 2.407 | 2.448 | 2.490 | 2.532 | 2.575 | 2.617 | 2.659 | 2.701 | 2.744 | 2.786 | 60 |
| 70 | 2.786 | 2.829 | 2.871 | 2.914 | 2.957 | 2.999 | 3.042 | 3.085 | 3.128 | 3.171 | 3.215 | 70 |
| 80 | 3.215 | 3.258 | 3.301 | 3.344 | 3.388 | 3.431 | 3.475 | 3.518 | 3.562 | 3.606 | 3.650 | 80 |
| 90 | 3.650 | 3.693 | 3.737 | 3.781 | 3.825 | 3.869 | 3.914 | 3.958 | 4.002 | 4.047 | 4.091 | 90 |
| 100 | 4.091 | 4.135 | 4.180 | 4.225 | 4.269 | 4.314 | 4.359 | 4.404 | 4.448 | 4.493 | 4.538 | 100 |
| 110 | 4.538 | 4.583 | 4.629 | 4.674 | 4.719 | 4.764 | 4.810 | 4.855 | 4.900 | 4.946 | 4.992 | 110 |
| 120 | 4.992 | 5.037 | 5.083 | 5.129 | 5.174 | 5.220 | 5.266 | 5.312 | 5.358 | 5.404 | 5.450 | 120 |
| 130 | 5.450 | 5.496 | 5.542 | 5.589 | 5.635 | 5.681 | 5.727 | 5.774 | 5.820 | 5.867 | 5.913 | 130 |
| 140 | 5.913 | 5.960 | 6.007 | 6.053 | 6.100 | 6.147 | 6.194 | 6.241 | 6.287 | 6.334 | 6.381 | 140 |
| 150 | 6.381 | 6.428 | 6.476 | 6.523 | 6.570 | 6.617 | 6.664 | 6.712 | 6.759 | 6.806 | 6.854 | 150 |
| 160 | 6.854 | 6.901 | 6.949 | 6.996 | 7.044 | 7.091 | 7.139 | 7.186 | 7.234 | 7.282 | 7.330 | 160 |
| 170 | 7.330 | 7.377 | 7.425 | 7.473 | 7.521 | 7.569 | 7.617 | 7.665 | 7.713 | 7.761 | 7.809 | 170 |
| 180 | 7.809 | 7.857 | 7.905 | 7.954 | 8.002 | 8.050 | 8.098 | 8.147 | 8.195 | 8.243 | 8.292 | 180 |
| 190 | 8.292 | 8.340 | 8.388 | 8.437 | 8.485 | 8.534 | 8.582 | 8.631 | 8.679 | 8.728 | 8.777 | 190 |
| 200 | 8.777 | 8.825 | 8.874 | 8.923 | 8.971 | 9.020 | 9.069 | 9.118 | 9.166 | 9.215 | 9.264 | 200 |
| 210 | 9.264 | 9.313 | 9.362 | 9.410 | 9.459 | 9.508 | 9.557 | 9.606 | 9.655 | 9.704 | 9.753 | 210 |
| 220 | 9.753 | 9.802 | 9.851 | 9.900 | 9.949 | 9.998 | 10.047 | 10.096 | 10.145 | 10.194 | 10.243 | 220 |
| 230 | 10.243 | 10.292 | 10.341 | 10.390 | 10.439 | 10.488 | 10.537 | 10.586 | 10.636 | 10.685 | 10.734 | 230 |
| 240 | 10.734 | 10.783 | 10.832 | 10.881 | 10.930 | 10.979 | 11.028 | 11.078 | 11.127 | 11.176 | 11.225 | 240 |
| 250 | 11.225 | 11.274 | 11.323 | 11.372 | 11.421 | 11.470 | 11.519 | 11.568 | 11.618 | 11.667 | 11.716 | 250 |
| 260 | 11.716 | 11.765 | 11.814 | 11.863 | 11.912 | 11.961 | 12.010 | 12.059 | 12.108 | 12.156 | 12.205 | 260 |
| 270 | 12.205 | 12.254 | 12.303 | 12.352 | 12.401 | 12.450 | 12.499 | 12.547 | 12.596 | 12.645 | 12.694 | 270 |
| 280 | 12.694 | 12.742 | 12.791 | 12.840 | 12.888 | 12.937 | 12.985 | 13.034 | 13.083 | 13.131 | 13.180 | 280 |
| 290 | 13.180 | 13.228 | 13.276 | 13.325 | 13.373 | 13.421 | 13.470 | 13.518 | 13.566 | 13.614 | 13.663 | 290 |
| 300 | 13.663 | 13.711 | 13.759 | 13.807 | 13.855 | 13.903 | 13.951 | 13.998 | 14.046 | 14.094 | 14.142 | 300 |
| 310 | 14.142 | 14.189 | 14.237 | 14.285 | 14.332 | 14.380 | 14.427 | 14.474 | 14.522 | 14.569 | 14.616 | 310 |
| 320 | 14.616 | 14.663 | 14.711 | 14.758 | 14.805 | 14.852 | 14.898 | 14.945 | 14.992 | 15.039 | 15.085 | 320 |
| 330 | 15.085 | 15.132 | 15.178 | 15.225 | 15.271 | 15.317 | 15.364 | 15.410 | 15.456 | 15.502 | 15.548 | 330 |
| 340 | 15.548 | 15.594 | 15.639 | 15.685 | 15.731 | 15.776 | 15.822 | 15.867 | 15.912 | 15.957 | 16.002 | 340 |
| 350 | 16.002 | 16.047 | 16.092 | 16.137 | 16.182 | 16.227 | 16.271 | 16.316 | 16.360 | 16.404 | 16.448 | 350 |
| 360 | 16.448 | 16.492 | 16.536 | 16.580 | 16.624 | 16.667 | 16.711 | 16.754 | 16.798 | 16.841 | 16.884 | 360 |
| 370 | 16.884 | 16.927 | 16.970 | 17.013 | 17.056 | 17.099 | 17.142 | 17.185 | 17.228 | 17.271 | 17.314 | 370 |
| 380 | 17.314 | 17.357 | 17.400 | 17.443 | 17.487 | 17.530 | 17.573 | 17.616 | 17.659 | 17.703 | 17.746 | 380 |
| 390 | 17.746 | 17.789 | 17.833 | 17.876 | 17.920 | 17.963 | 18.007 | 18.050 | 18.094 | 18.137 | 18.181 | 390 |
| 400 | 18.181 | 18.225 | 18.268 | 18.312 | 18.356 | 18.399 | 18.443 | 18.487 | 18.531 | 18.575 | 18.618 | 400 |
| 410 | 18.618 | 18.662 | 18.706 | 18.750 | 18.794 | 18.838 | 18.882 | 18.926 | 18.971 | 19.015 | 19.059 | 410 |
| 420 | 19.059 | 19.103 | 19.147 | 19.192 | 19.236 | 19.280 | 19.325 | 19.369 | 19.413 | 19.458 | 19.502 | 420 |
| 430 | 19.502 | 19.547 | 19.592 | 19.636 | 19.681 | 19.725 | 19.770 | 19.815 | 19.860 | 19.904 | 19.949 | 430 |
| 440 | 19.949 | 19.994 | 20.039 | 20.084 | 20.129 | 20.174 | 20.219 | 20.264 | 20.309 | 20.354 | 20.399 | 440 |
| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |

TABLE 23 Type M Thermocouple— thermoelectric voltage as a function of temperature (°C); reference junctions at 0 °C

| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
| Thermoelectric Voltage in Millivolts | | | | | | | | | | | | |
| 450 | 20.399 | 20.445 | 20.490 | 20.535 | 20.580 | 20.626 | 20.671 | 20.717 | 20.762 | 20.808 | 20.853 | 450 |
| 460 | 20.853 | 20.899 | 20.944 | 20.990 | 21.035 | 21.081 | 21.127 | 21.173 | 21.218 | 21.264 | 21.310 | 460 |
| 470 | 21.310 | 21.356 | 21.402 | 21.448 | 21.494 | 21.540 | 21.586 | 21.632 | 21.678 | 21.725 | 21.771 | 470 |
| 480 | 21.771 | 21.817 | 21.863 | 21.910 | 21.956 | 22.002 | 22.049 | 22.095 | 22.142 | 22.188 | 22.235 | 480 |
| 490 | 22.235 | 22.282 | 22.328 | 22.375 | 22.422 | 22.468 | 22.515 | 22.562 | 22.609 | 22.656 | 22.703 | 490 |
| 500 | 22.703 | 22.750 | 22.797 | 22.844 | 22.891 | 22.938 | 22.985 | 23.032 | 23.080 | 23.127 | 23.174 | 500 |
| 510 | 23.174 | 23.221 | 23.269 | 23.316 | 23.364 | 23.411 | 23.459 | 23.506 | 23.554 | 23.601 | 23.649 | 510 |
| 520 | 23.649 | 23.697 | 23.744 | 23.792 | 23.840 | 23.888 | 23.936 | 23.984 | 24.032 | 24.079 | 24.127 | 520 |
| 530 | 24.127 | 24.176 | 24.224 | 24.272 | 24.320 | 24.368 | 24.416 | 24.465 | 24.513 | 24.561 | 24.610 | 530 |
| 540 | 24.610 | 24.658 | 24.706 | 24.755 | 24.803 | 24.852 | 24.900 | 24.949 | 24.998 | 25.046 | 25.095 | 540 |
| 550 | 25.095 | 25.144 | 25.193 | 25.241 | 25.290 | 25.339 | 25.388 | 25.437 | 25.486 | 25.535 | 25.584 | 550 |
| 560 | 25.584 | 25.633 | 25.682 | 25.732 | 25.781 | 25.830 | 25.879 | 25.929 | 25.978 | 26.027 | 26.077 | 560 |
| 570 | 26.077 | 26.126 | 26.176 | 26.225 | 26.275 | 26.324 | 26.374 | 26.423 | 26.473 | 26.523 | 26.573 | 570 |
| 580 | 26.573 | 26.622 | 26.672 | 26.722 | 26.772 | 26.822 | 26.872 | 26.922 | 26.972 | 27.022 | 27.072 | 580 |
| 590 | 27.072 | 27.122 | 27.172 | 27.222 | 27.272 | 27.323 | 27.373 | 27.423 | 27.474 | 27.524 | 27.574 | 590 |
| 600 | 27.574 | 27.625 | 27.675 | 27.726 | 27.776 | 27.827 | 27.877 | 27.928 | 27.979 | 28.029 | 28.080 | 600 |
| 610 | 28.080 | 28.131 | 28.182 | 28.232 | 28.283 | 28.334 | 28.385 | 28.436 | 28.487 | 28.538 | 28.589 | 610 |
| 620 | 28.589 | 28.640 | 28.691 | 28.742 | 28.794 | 28.845 | 28.896 | 28.947 | 28.999 | 29.050 | 29.101 | 620 |
| 630 | 29.101 | 29.153 | 29.204 | 29.256 | 29.307 | 29.358 | 29.410 | 29.462 | 29.513 | 29.565 | 29.616 | 630 |
| 640 | 29.616 | 29.668 | 29.720 | 29.772 | 29.823 | 29.875 | 29.927 | 29.979 | 30.031 | 30.083 | 30.135 | 640 |
| 650 | 30.135 | 30.187 | 30.239 | 30.291 | 30.343 | 30.395 | 30.447 | 30.499 | 30.552 | 30.604 | 30.656 | 650 |
| 660 | 30.656 | 30.708 | 30.761 | 30.813 | 30.865 | 30.918 | 30.970 | 31.023 | 31.075 | 31.128 | 31.180 | 660 |
| 670 | 31.180 | 31.233 | 31.285 | 31.338 | 31.391 | 31.443 | 31.496 | 31.549 | 31.601 | 31.654 | 31.707 | 670 |
| 680 | 31.707 | 31.760 | 31.813 | 31.866 | 31.919 | 31.972 | 32.025 | 32.078 | 32.131 | 32.184 | 32.237 | 680 |
| 690 | 32.237 | 32.290 | 32.343 | 32.396 | 32.450 | 32.503 | 32.556 | 32.609 | 32.663 | 32.716 | 32.769 | 690 |
| 700 | 32.769 | 32.823 | 32.876 | 32.930 | 32.983 | 33.037 | 33.090 | 33.144 | 33.197 | 33.251 | 33.304 | 700 |
| 710 | 33.304 | 33.358 | 33.412 | 33.465 | 33.519 | 33.573 | 33.627 | 33.681 | 33.734 | 33.788 | 33.842 | 710 |
| 720 | 33.842 | 33.896 | 33.950 | 34.004 | 34.058 | 34.112 | 34.166 | 34.220 | 34.274 | 34.328 | 34.382 | 720 |
| 730 | 34.382 | 34.436 | 34.491 | 34.545 | 34.599 | 34.653 | 34.708 | 34.762 | 34.816 | 34.871 | 34.925 | 730 |
| 740 | 34.925 | 34.979 | 35.034 | 35.088 | 35.143 | 35.197 | 35.252 | 35.306 | 35.361 | 35.415 | 35.470 | 740 |
| 750 | 35.470 | 35.525 | 35.579 | 35.634 | 35.689 | 35.743 | 35.798 | 35.853 | 35.908 | 35.962 | 36.017 | 750 |
| 760 | 36.017 | 36.072 | 36.127 | 36.182 | 36.237 | 36.292 | 36.347 | 36.402 | 36.457 | 36.512 | 36.567 | 760 |
| 770 | 36.567 | 36.622 | 36.677 | 36.732 | 36.787 | 36.842 | 36.898 | 36.953 | 37.008 | 37.063 | 37.119 | 770 |
| 780 | 37.119 | 37.174 | 37.229 | 37.284 | 37.340 | 37.395 | 37.451 | 37.506 | 37.561 | 37.617 | 37.672 | 780 |
| 790 | 37.672 | 37.728 | 37.783 | 37.839 | 37.894 | 37.950 | 38.006 | 38.061 | 38.117 | 38.173 | 38.228 | 790 |
| 800 | 38.228 | 38.284 | 38.340 | 38.395 | 38.451 | 38.507 | 38.563 | 38.618 | 38.674 | 38.730 | 38.786 | 800 |
| 810 | 38.786 | 38.842 | 38.898 | 38.954 | 39.010 | 39.066 | 39.122 | 39.178 | 39.234 | 39.290 | 39.346 | 810 |
| 820 | 39.346 | 39.402 | 39.458 | 39.514 | 39.570 | 39.626 | 39.682 | 39.739 | 39.795 | 39.851 | 39.907 | 820 |
| 830 | 39.907 | 39.964 | 40.020 | 40.076 | 40.132 | 40.189 | 40.245 | 40.301 | 40.358 | 40.414 | 40.471 | 830 |
| 840 | 40.471 | 40.527 | 40.583 | 40.640 | 40.696 | 40.753 | 40.809 | 40.866 | 40.923 | 40.979 | 41.036 | 840 |
| 850 | 41.036 | 41.092 | 41.149 | 41.205 | 41.262 | 41.319 | 41.375 | 41.432 | 41.489 | 41.546 | 41.602 | 850 |
| 860 | 41.602 | 41.659 | 41.716 | 41.773 | 41.829 | 41.886 | 41.943 | 42.000 | 42.057 | 42.114 | 42.171 | 860 |
| 870 | 42.171 | 42.228 | 42.284 | 42.341 | 42.398 | 42.455 | 42.512 | 42.569 | 42.626 | 42.683 | 42.740 | 870 |
| 880 | 42.740 | 42.797 | 42.855 | 42.912 | 42.969 | 43.026 | 43.083 | 43.140 | 43.197 | 43.255 | 43.312 | 880 |
| 890 | 43.312 | 43.369 | 43.426 | 43.483 | 43.541 | 43.598 | 43.655 | 43.712 | 43.770 | 43.827 | 43.884 | 890 |
| 900 | 43.884 | 43.942 | 43.999 | 44.057 | 44.114 | 44.171 | 44.229 | 44.286 | 44.344 | 44.401 | 44.459 | 900 |
| 910 | 44.459 | 44.516 | 44.574 | 44.631 | 44.689 | 44.746 | 44.804 | 44.861 | 44.919 | 44.976 | 45.034 | 910 |
| 920 | 45.034 | 45.092 | 45.149 | 45.207 | 45.264 | 45.322 | 45.380 | 45.438 | 45.495 | 45.553 | 45.611 | 920 |
| 930 | 45.611 | 45.668 | 45.726 | 45.784 | 45.842 | 45.899 | 45.957 | 46.015 | 46.073 | 46.131 | 46.189 | 930 |
| 940 | 46.189 | 46.246 | 46.304 | 46.362 | 46.420 | 46.478 | 46.536 | 46.594 | 46.652 | 46.710 | 46.768 | 940 |
| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |

TABLE 23 Type M Thermocouple — thermoelectric voltage as a function of temperature (°C); reference junctions at 0 °C

| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| Thermoelectric Voltage in Millivolts | | | | | | | | | | | | |
| 950 | 46.768 | 46.826 | 46.884 | 46.942 | 47.000 | 47.058 | 47.116 | 47.174 | 47.232 | 47.290 | 47.348 | 950 |
| 960 | 47.348 | 47.406 | 47.464 | 47.522 | 47.580 | 47.639 | 47.697 | 47.755 | 47.813 | 47.871 | 47.929 | 960 |
| 970 | 47.929 | 47.988 | 48.046 | 48.104 | 48.162 | 48.220 | 48.279 | 48.337 | 48.395 | 48.454 | 48.512 | 970 |
| 980 | 48.512 | 48.570 | 48.628 | 48.687 | 48.745 | 48.803 | 48.862 | 48.920 | 48.979 | 49.037 | 49.095 | 980 |
| 990 | 49.095 | 49.154 | 49.212 | 49.271 | 49.329 | 49.387 | 49.446 | 49.504 | 49.563 | 49.621 | 49.680 | 990 |
| 1000 | 49.680 | 49.738 | 49.797 | 49.855 | 49.914 | 49.972 | 50.031 | 50.090 | 50.148 | 50.207 | 50.265 | 1000 |
| 1010 | 50.265 | 50.324 | 50.383 | 50.441 | 50.500 | 50.558 | 50.617 | 50.676 | 50.734 | 50.793 | 50.852 | 1010 |
| 1020 | 50.852 | 50.911 | 50.969 | 51.028 | 51.087 | 51.145 | 51.204 | 51.263 | 51.322 | 51.380 | 51.439 | 1020 |
| 1030 | 51.439 | 51.498 | 51.557 | 51.616 | 51.674 | 51.733 | 51.792 | 51.851 | 51.910 | 51.969 | 52.027 | 1030 |
| 1040 | 52.027 | 52.086 | 52.145 | 52.204 | 52.263 | 52.322 | 52.381 | 52.440 | 52.499 | 52.558 | 52.617 | 1040 |
| 1050 | 52.617 | 52.676 | 52.735 | 52.793 | 52.852 | 52.911 | 52.970 | 53.029 | 53.089 | 53.148 | 53.207 | 1050 |
| 1060 | 53.207 | 53.266 | 53.325 | 53.384 | 53.443 | 53.502 | 53.561 | 53.620 | 53.679 | 53.738 | 53.797 | 1060 |
| 1070 | 53.797 | 53.856 | 53.916 | 53.975 | 54.034 | 54.093 | 54.152 | 54.211 | 54.271 | 54.330 | 54.389 | 1070 |
| 1080 | 54.389 | 54.448 | 54.507 | 54.567 | 54.626 | 54.685 | 54.744 | 54.803 | 54.863 | 54.922 | 54.981 | 1080 |
| 1090 | 54.981 | 55.041 | 55.100 | 55.159 | 55.218 | 55.278 | 55.337 | 55.396 | 55.456 | 55.515 | 55.574 | 1090 |
| 1100 | 55.574 | 55.634 | 55.693 | 55.752 | 55.812 | 55.871 | 55.930 | 55.990 | 56.049 | 56.109 | 56.168 | 1100 |
| 1110 | 56.168 | 56.227 | 56.287 | 56.346 | 56.406 | 56.465 | 56.525 | 56.584 | 56.644 | 56.703 | 56.762 | 1110 |
| 1120 | 56.762 | 56.822 | 56.881 | 56.941 | 57.000 | 57.060 | 57.119 | 57.179 | 57.238 | 57.298 | 57.357 | 1120 |
| 1130 | 57.357 | 57.417 | 57.477 | 57.536 | 57.596 | 57.655 | 57.715 | 57.774 | 57.834 | 57.894 | 57.953 | 1130 |
| 1140 | 57.953 | 58.013 | 58.072 | 58.132 | 58.191 | 58.251 | 58.311 | 58.370 | 58.430 | 58.490 | 58.549 | 1140 |
| 1150 | 58.549 | 58.609 | 58.669 | 58.728 | 58.788 | 58.848 | 58.907 | 58.967 | 59.027 | 59.086 | 59.146 | 1150 |
| 1160 | 59.146 | 59.206 | 59.265 | 59.325 | 59.385 | 59.444 | 59.504 | 59.564 | 59.624 | 59.683 | 59.743 | 1160 |
| 1170 | 59.743 | 59.803 | 59.863 | 59.922 | 59.982 | 60.042 | 60.102 | 60.161 | 60.221 | 60.281 | 60.341 | 1170 |
| 1180 | 60.341 | 60.400 | 60.460 | 60.520 | 60.580 | 60.640 | 60.699 | 60.759 | 60.819 | 60.879 | 60.939 | 1180 |
| 1190 | 60.939 | 60.998 | 61.058 | 61.118 | 61.178 | 61.238 | 61.297 | 61.357 | 61.417 | 61.477 | 61.537 | 1190 |
| 1200 | 61.537 | 61.597 | 61.656 | 61.716 | 61.776 | 61.836 | 61.896 | 61.956 | 62.015 | 62.075 | 62.135 | 1200 |
| 1210 | 62.135 | 62.195 | 62.255 | 62.315 | 62.375 | 62.434 | 62.494 | 62.554 | 62.614 | 62.674 | 62.734 | 1210 |
| 1220 | 62.734 | 62.794 | 62.854 | 62.913 | 62.973 | 63.033 | 63.093 | 63.153 | 63.213 | 63.273 | 63.333 | 1220 |
| 1230 | 63.333 | 63.392 | 63.452 | 63.512 | 63.572 | 63.632 | 63.692 | 63.752 | 63.812 | 63.872 | 63.931 | 1230 |
| 1240 | 63.931 | 63.991 | 64.051 | 64.111 | 64.171 | 64.231 | 64.291 | 64.351 | 64.411 | 64.470 | 64.530 | 1240 |
| 1250 | 64.530 | 64.590 | 64.650 | 64.710 | 64.770 | 64.830 | 64.890 | 64.950 | 65.009 | 65.069 | 65.129 | 1250 |
| 1260 | 65.129 | 65.189 | 65.249 | 65.309 | 65.369 | 65.429 | 65.488 | 65.548 | 65.608 | 65.668 | 65.728 | 1260 |
| 1270 | 65.728 | 65.788 | 65.848 | 65.907 | 65.967 | 66.027 | 66.087 | 66.147 | 66.207 | 66.267 | 66.326 | 1270 |
| 1280 | 66.326 | 66.386 | 66.446 | 66.506 | 66.566 | 66.626 | 66.686 | 66.745 | 66.805 | 66.865 | 66.925 | 1280 |
| 1290 | 66.925 | 66.985 | 67.045 | 67.104 | 67.164 | 67.224 | 67.284 | 67.344 | 67.404 | 67.463 | 67.523 | 1290 |
| 1300 | 67.523 | 67.583 | 67.643 | 67.703 | 67.762 | 67.822 | 67.882 | 67.942 | 68.002 | 68.061 | 68.121 | 1300 |
| 1310 | 68.121 | 68.181 | 68.241 | 68.301 | 68.360 | 68.420 | 68.480 | 68.540 | 68.599 | 68.659 | 68.719 | 1310 |
| 1320 | 68.719 | 68.779 | 68.839 | 68.898 | 68.958 | 69.018 | 69.078 | 69.137 | 69.197 | 69.257 | 69.317 | 1320 |
| 1330 | 69.317 | 69.376 | 69.436 | 69.496 | 69.556 | 69.615 | 69.675 | 69.735 | 69.795 | 69.854 | 69.914 | 1330 |
| 1340 | 69.914 | 69.974 | 70.034 | 70.093 | 70.153 | 70.213 | 70.272 | 70.332 | 70.392 | 70.452 | 70.511 | 1340 |
| 1350 | 70.511 | 70.571 | 70.631 | 70.691 | 70.750 | 70.810 | 70.870 | 70.930 | 70.989 | 71.049 | 71.109 | 1350 |
| 1360 | 71.109 | 71.169 | 71.228 | 71.288 | 71.348 | 71.408 | 71.467 | 71.527 | 71.587 | 71.647 | 71.707 | 1360 |
| 1370 | 71.707 | 71.766 | 71.826 | 71.886 | 71.946 | 72.005 | 72.065 | 72.125 | 72.185 | 72.245 | 72.305 | 1370 |
| 1380 | 72.305 | 72.364 | 72.424 | 72.484 | 72.544 | 72.604 | 72.664 | 72.724 | 72.783 | 72.843 | 72.903 | 1380 |
| 1390 | 72.903 | 72.963 | 73.023 | 73.083 | 73.143 | 73.203 | 73.263 | 73.323 | 73.383 | 73.443 | 73.503 | 1390 |
| 1400 | 73.503 | 73.563 | 73.623 | 73.683 | 73.743 | 73.803 | 73.863 | 73.923 | 73.984 | 74.044 | 74.104 | 1400 |
| 1410 | 74.104 | | | | | | | | | | | 1410 |
| °C | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | °C |