## Saturated Water and Steam

| $t$ [°C] | $p_s$ [bar] | $v_g$ [m³/kg] | $h_f$ [kJ/kg] | $h_{fg}$ [kJ/kg] | $h_g$ [kJ/kg] | $s_f$ [kJ/kg K] | $s_{fg}$ [kJ/kg K] | $s_g$ [kJ/kg K] |
|---|---|---|---|---|---|---|---|---|
| 0.01 | 0.006112 | 206.1 | 0* | 2500.8 | 2500.8 | 0† | 9.155 | 9.155 |
| 1 | 0.006566 | 192.6 | 4.2 | 2498.3 | 2502.5 | 0.015 | 9.113 | 9.128 |
| 2 | 0.007054 | 179.9 | 8.4 | 2495.9 | 2504.3 | 0.031 | 9.071 | 9.102 |
| 3 | 0.007575 | 168.2 | 12.6 | 2493.6 | 2506.2 | 0.046 | 9.030 | 9.076 |
| 4 | 0.008129 | 157.3 | 16.8 | 2491.3 | 2508.1 | 0.061 | 8.989 | 9.050 |
| 5 | 0.008719 | 147.1 | 21.0 | 2488.9 | 2509.9 | 0.076 | 8.948 | 9.024 |
| 6 | 0.009346 | 137.8 | 25.2 | 2486.6 | 2511.8 | 0.091 | 8.908 | 8.999 |
| 7 | 0.01001 | 129.1 | 29.4 | 2484.3 | 2513.7 | 0.106 | 8.868 | 8.974 |
| 8 | 0.01072 | 121.0 | 33.6 | 2481.9 | 2515.5 | 0.121 | 8.828 | 8.949 |
| 9 | 0.01147 | 113.4 | 37.8 | 2479.6 | 2517.4 | 0.136 | 8.788 | 8.924 |
| 10 | 0.01227 | 106.4 | 42.0 | 2477.2 | 2519.2 | 0.151 | 8.749 | 8.900 |
| 11 | 0.01312 | 99.90 | 46.2 | 2474.9 | 2521.1 | 0.166 | 8.710 | 8.876 |
| 12 | 0.01401 | 93.83 | 50.4 | 2472.5 | 2522.9 | 0.180 | 8.671 | 8.851 |
| 13 | 0.01497 | 88.17 | 54.6 | 2470.2 | 2524.8 | 0.195 | 8.633 | 8.828 |
| 14 | 0.01597 | 82.89 | 58.8 | 2467.8 | 2526.6 | 0.210 | 8.594 | 8.804 |
| 15 | 0.01704 | 77.97 | 62.9 | 2465.5 | 2528.4 | 0.224 | 8.556 | 8.780 |
| 16 | 0.01817 | 73.38 | 67.1 | 2463.1 | 2530.2 | 0.239 | 8.518 | 8.757 |
| 17 | 0.01936 | 69.09 | 71.3 | 2460.8 | 2532.1 | 0.253 | 8.481 | 8.734 |
| 18 | 0.02063 | 65.08 | 75.5 | 2458.4 | 2533.9 | 0.268 | 8.444 | 8.712 |
| 19 | 0.02196 | 61.34 | 79.7 | 2456.0 | 2535.7 | 0.282 | 8.407 | 8.689 |
| 20 | 0.02337 | 57.84 | 83.9 | 2453.7 | 2537.6 | 0.296 | 8.370 | 8.666 |
| 21 | 0.02486 | 54.56 | 88.0 | 2451.4 | 2539.4 | 0.310 | 8.334 | 8.644 |
| 22 | 0.02642 | 51.49 | 92.2 | 2449.0 | 2541.2 | 0.325 | 8.297 | 8.622 |
| 23 | 0.02808 | 48.62 | 96.4 | 2446.6 | 2543.0 | 0.339 | 8.261 | 8.600 |
| 24 | 0.02982 | 45.92 | 100.6 | 2444.2 | 2544.8 | 0.353 | 8.226 | 8.579 |
| 25 | 0.03166 | 43.40 | 104.8 | 2441.8 | 2546.6 | 0.367 | 8.190 | 8.557 |
| 26 | 0.03360 | 41.03 | 108.9 | 2439.5 | 2548.4 | 0.381 | 8.155 | 8.536 |
| 27 | 0.03564 | 38.81 | 113.1 | 2437.2 | 2550.3 | 0.395 | 8.120 | 8.515 |
| 28 | 0.03778 | 36.73 | 117.3 | 2434.8 | 2552.1 | 0.409 | 8.085 | 8.494 |
| 29 | 0.04004 | 34.77 | 121.5 | 2432.4 | 2553.9 | 0.423 | 8.050 | 8.473 |
| 30 | 0.04242 | 32.93 | 125.7 | 2430.0 | 2555.7 | 0.436 | 8.016 | 8.452 |
| 32 | 0.04754 | 29.57 | 134.0 | 2425.3 | 2559.3 | 0.464 | 7.948 | 8.412 |
| 34 | 0.05318 | 26.60 | 142.4 | 2420.5 | 2562.9 | 0.491 | 7.881 | 8.372 |
| 36 | 0.05940 | 23.97 | 150.7 | 2415.8 | 2566.5 | 0.518 | 7.814 | 8.332 |
| 38 | 0.06624 | 21.63 | 159.1 | 2411.0 | 2570.1 | 0.545 | 7.749 | 8.294 |
| 40 | 0.07375 | 19.55 | 167.5 | 2406.2 | 2573.7 | 0.572 | 7.684 | 8.256 |
| 42 | 0.08198 | 17.69 | 175.8 | 2401.4 | 2577.2 | 0.599 | 7.620 | 8.219 |
| 44 | 0.09100 | 16.03 | 184.2 | 2396.6 | 2580.8 | 0.625 | 7.557 | 8.182 |
| 46 | 0.1009 | 14.56 | 192.5 | 2391.8 | 2584.3 | 0.651 | 7.494 | 8.145 |
| 48 | 0.1116 | 13.23 | 200.9 | 2387.0 | 2587.9 | 0.678 | 7.433 | 8.111 |
| 50 | 0.1233 | 12.04 | 209.3 | 2382.1 | 2591.4 | 0.704 | 7.371 | 8.075 |
| 55 | 0.1574 | 9.578 | 230.2 | 2370.1 | 2600.3 | 0.768 | 7.223 | 7.991 |
| 60 | 0.1992 | 7.678 | 251.1 | 2357.9 | 2609.0 | 0.831 | 7.078 | 7.909 |
| 65 | 0.2501 | 6.201 | 272.0 | 2345.7 | 2617.7 | 0.893 | 6.937 | 7.830 |
| 70 | 0.3116 | 5.045 | 293.0 | 2333.3 | 2626.3 | 0.955 | 6.800 | 7.755 |
| 75 | 0.3855 | 4.133 | 313.9 | 2320.8 | 2634.7 | 1.015 | 6.666 | 7.681 |
| 80 | 0.4736 | 3.408 | 334.9 | 2308.3 | 2643.2 | 1.075 | 6.536 | 7.611 |
| 85 | 0.5780 | 2.828 | 355.9 | 2295.6 | 2651.5 | 1.134 | 6.410 | 7.544 |
| 90 | 0.7011 | 2.361 | 376.9 | 2282.8 | 2659.7 | 1.192 | 6.286 | 7.478 |
| 95 | 0.8453 | 1.982 | 398.0 | 2269.8 | 2667.8 | 1.250 | 6.166 | 7.416 |
| 100 | 1.01325 | 1.673 | 419.1 | 2256.7 | 2675.8 | 1.307 | 6.048 | 7.355 |

† $u$ and $s$ are chosen to be zero for saturated liquid at the triple point.

Note: values of $v_f$ can be found on p. 10.





| $p$ [bar] | $t_s$ [°C] | $v_g$ [m³/kg] | $u_f$ [kJ/kg] | $u_g$ [kJ/kg] | $h_f$ [kJ/kg] | $h_{fg}$ [kJ/kg] | $h_g$ [kJ/kg] | $s_f$ [kJ/kg K] | $s_{fg}$ [kJ/kg K] | $s_g$ [kJ/kg K] |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.006112 | 0.01 | 206.1 | 0† | 2375 | 0* | 2501 | 2501 | 0† | 9.155 | 9.155 |
| 0.010 | 7.0 | 129.2 | 29 | 2385 | 29 | 2485 | 2514 | 0.106 | 8.868 | 8.974 |
| 0.015 | 13.0 | 87.98 | 55 | 2393 | 55 | 2470 | 2525 | 0.196 | 8.631 | 8.827 |
| 0.020 | 17.5 | 67.01 | 73 | 2399 | 73 | 2460 | 2533 | 0.261 | 8.462 | 8.723 |
| 0.025 | 21.1 | 54.26 | 88 | 2403 | 88 | 2451 | 2539 | 0.312 | 8.330 | 8.642 |
| 0.030 | 24.1 | 45.67 | 101 | 2408 | 101 | 2444 | 2545 | 0.354 | 8.222 | 8.576 |
| 0.035 | 26.7 | 39.48 | 112 | 2412 | 112 | 2438 | 2550 | 0.391 | 8.130 | 8.521 |
| 0.040 | 29.0 | 34.80 | 121 | 2415 | 121 | 2433 | 2554 | 0.422 | 8.051 | 8.473 |
| 0.045 | 31.0 | 31.14 | 130 | 2418 | 130 | 2428 | 2558 | 0.451 | 7.980 | 8.431 |
| 0.050 | 32.9 | 28.20 | 138 | 2420 | 138 | 2423 | 2561 | 0.476 | 7.918 | 8.394 |
| 0.055 | 34.6 | 25.77 | 145 | 2422 | 145 | 2419 | 2564 | 0.500 | 7.860 | 8.360 |
| 0.060 | 36.2 | 23.74 | 152 | 2425 | 152 | 2415 | 2567 | 0.521 | 7.808 | 8.329 |
| 0.065 | 37.7 | 22.02 | 158 | 2427 | 158 | 2412 | 2570 | 0.541 | 7.760 | 8.301 |
| 0.070 | 39.0 | 20.53 | 163 | 2428 | 163 | 2409 | 2572 | 0.559 | 7.715 | 8.274 |
| 0.075 | 40.3 | 19.24 | 169 | 2430 | 169 | 2405 | 2574 | 0.576 | 7.674 | 8.250 |
| 0.080 | 41.5 | 18.10 | 174 | 2432 | 174 | 2402 | 2576 | 0.593 | 7.634 | 8.227 |
| 0.085 | 42.7 | 17.10 | 179 | 2434 | 179 | 2400 | 2579 | 0.608 | 7.598 | 8.206 |
| 0.090 | 43.8 | 16.20 | 183 | 2435 | 183 | 2397 | 2580 | 0.622 | 7.564 | 8.186 |
| 0.095 | 44.8 | 15.40 | 188 | 2436 | 188 | 2394 | 2582 | 0.636 | 7.531 | 8.167 |
| 0.100 | 45.8 | 14.67 | 192 | 2437 | 192 | 2392 | 2584 | 0.649 | 7.500 | 8.149 |
| 0.12 | 49.4 | 12.36 | 207 | 2442 | 207 | 2383 | 2590 | 0.696 | 7.389 | 8.085 |
| 0.14 | 52.6 | 10.69 | 220 | 2446 | 220 | 2376 | 2596 | 0.737 | 7.294 | 8.031 |
| 0.16 | 55.3 | 9.432 | 232 | 2450 | 232 | 2369 | 2601 | 0.772 | 7.213 | 7.985 |
| 0.18 | 57.8 | 8.444 | 242 | 2453 | 242 | 2363 | 2605 | 0.804 | 7.140 | 7.944 |
| 0.20 | 60.1 | 7.648 | 251 | 2456 | 251 | 2358 | 2609 | 0.832 | 7.075 | 7.907 |
| 0.22 | 62.2 | 6.994 | 260 | 2459 | 260 | 2355 | 2613 | 0.858 | 7.016 | 7.874 |
| 0.24 | 64.1 | 6.445 | 268 | 2461 | 268 | 2348 | 2616 | 0.882 | 6.962 | 7.844 |
| 0.26 | 65.9 | 5.979 | 276 | 2464 | 276 | 2343 | 2619 | 0.904 | 6.913 | 7.817 |
| 0.28 | 67.5 | 5.578 | 283 | 2466 | 283 | 2339 | 2622 | 0.925 | 6.866 | 7.791 |
| 0.30 | 69.1 | 5.228 | 289 | 2468 | 289 | 2336 | 2625 | 0.944 | 6.823 | 7.767 |
| 0.32 | 70.6 | 4.921 | 295 | 2470 | 295 | 2332 | 2627 | 0.962 | 6.783 | 7.745 |
| 0.34 | 72.0 | 4.649 | 302 | 2472 | 302 | 2328 | 2630 | 0.980 | 6.745 | 7.725 |
| 0.36 | 73.4 | 4.407 | 307 | 2473 | 307 | 2325 | 2632 | 0.996 | 6.709 | 7.705 |
| 0.38 | 74.7 | 4.189 | 312 | 2475 | 312 | 2322 | 2634 | 1.011 | 6.675 | 7.686 |
| 0.40 | 75.9 | 3.992 | 318 | 2476 | 318 | 2318 | 2636 | 1.026 | 6.643 | 7.669 |
| 0.42 | 77.1 | 3.814 | 323 | 2478 | 323 | 2315 | 2638 | 1.040 | 6.612 | 7.652 |
| 0.44 | 78.2 | 3.651 | 327 | 2479 | 327 | 2313 | 2640 | 1.054 | 6.582 | 7.636 |
| 0.46 | 79.3 | 3.502 | 332 | 2481 | 332 | 2310 | 2642 | 1.067 | 6.554 | 7.621 |
| 0.48 | 80.3 | 3.366 | 336 | 2482 | 336 | 2308 | 2644 | 1.079 | 6.528 | 7.607 |
| 0.50 | 81.3 | 3.239 | 340 | 2483 | 340 | 2305 | 2645 | 1.091 | 6.502 | 7.593 |
| 0.55 | 83.7 | 2.964 | 351 | 2486 | 351 | 2298 | 2649 | 1.119 | 6.442 | 7.561 |
| 0.60 | 86.0 | 2.731 | 360 | 2489 | 360 | 2293 | 2653 | 1.145 | 6.386 | 7.531 |
| 0.65 | 88.0 | 2.535 | 369 | 2492 | 369 | 2288 | 2657 | 1.169 | 6.335 | 7.504 |
| 0.70 | 90.0 | 2.364 | 377 | 2494 | 377 | 2283 | 2660 | 1.192 | 6.286 | 7.478 |
| 0.75 | 91.8 | 2.217 | 384 | 2496 | 384 | 2278 | 2662 | 1.213 | 6.243 | 7.456 |
| 0.80 | 93.5 | 2.087 | 392 | 2498 | 392 | 2273 | 2665 | 1.233 | 6.201 | 7.434 |
| 0.85 | 95.2 | 1.972 | 399 | 2500 | 399 | 2269 | 2668 | 1.252 | 6.161 | 7.414 |
| 0.90 | 96.7 | 1.869 | 405 | 2502 | 405 | 2266 | 2671 | 1.270 | 6.124 | 7.394 |
| 0.95 | 98.2 | 1.777 | 411 | 2504 | 411 | 2262 | 2673 | 1.287 | 6.089 | 7.376 |
| 1.00 | 99.6 | 1.694 | 417 | 2506 | 417 | 2258 | 2675 | 1.303 | 6.056 | 7.359 |

$$\frac{h_f}{[\text{kJ/kg}]} = \frac{pv_f}{[\text{kJ/kg}]} = \frac{p}{[\text{bar}]} \times \frac{10^3[\text{N}]}{[\text{m}^2]} \times \frac{v_f}{[\text{m}^3/\text{kg}]} \times \left[\frac{\text{m}^3}{\text{kg}}\right] \times \frac{[\text{kJ}]}{10^3[\text{N m}]} \times \frac{1}{[\text{kJ/kg}]}$$

$$= \frac{p}{[\text{bar}]} \times \frac{v_f}{[\text{m}^3/\text{kg}]} \times 10^3 = 0.006112 \times 0.0010002 \times 10^3 = 0.0006112$$

| $p$ [bar] | $t_s$ [°C] | $v_g$ [m³/kg] | $u_f$ [kJ/kg] | $u_g$ [kJ/kg] | $h_f$ [kJ/kg] | $h_{fg}$ [kJ/kg] | $h_g$ [kJ/kg] | $s_f$ [kJ/kg K] | $s_{fg}$ [kJ/kg K] | $s_g$ [kJ/kg K] |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.0 | 99.6 | 1.694 | 417 | 2506 | 417 | 2258 | 2675 | 1.303 | 6.056 | 7.359 |
| 1.1 | 102.3 | 1.549 | 429 | 2510 | 429 | 2251 | 2680 | 1.333 | 5.994 | 7.327 |
| 1.2 | 104.8 | 1.428 | 439 | 2512 | 439 | 2244 | 2683 | 1.361 | 5.937 | 7.298 |
| 1.3 | 107.1 | 1.325 | 449 | 2515 | 449 | 2238 | 2687 | 1.387 | 5.884 | 7.271 |
| 1.4 | 109.3 | 1.236 | 458 | 2517 | 458 | 2232 | 2690 | 1.411 | 5.835 | 7.246 |
| 1.5 | 111.4 | 1.159 | 467 | 2519 | 467 | 2226 | 2693 | 1.434 | 5.789 | 7.223 |
| 1.6 | 113.3 | 1.091 | 475 | 2521 | 475 | 2221 | 2696 | 1.455 | 5.747 | 7.202 |
| 1.7 | 115.2 | 1.031 | 483 | 2524 | 483 | 2216 | 2699 | 1.475 | 5.707 | 7.182 |
| 1.8 | 116.9 | 0.9774 | 491 | 2526 | 491 | 2211 | 2702 | 1.494 | 5.669 | 7.163 |
| 1.9 | 118.6 | 0.9292 | 498 | 2528 | 498 | 2206 | 2704 | 1.513 | 5.632 | 7.145 |
| 2.0 | 120.2 | 0.8856 | 505 | 2530 | 505 | 2202 | 2707 | 1.530 | 5.597 | 7.127 |
| 2.1 | 121.8 | 0.8461 | 511 | 2531 | 511 | 2198 | 2709 | 1.547 | 5.564 | 7.111 |
| 2.2 | 123.3 | 0.8100 | 518 | 2533 | 518 | 2193 | 2711 | 1.563 | 5.533 | 7.096 |
| 2.3 | 124.7 | 0.7770 | 524 | 2534 | 524 | 2189 | 2713 | 1.578 | 5.503 | 7.081 |
| 2.4 | 126.1 | 0.7466 | 530 | 2536 | 530 | 2185 | 2715 | 1.593 | 5.474 | 7.067 |
| 2.5 | 127.4 | 0.7186 | 535 | 2537 | 535 | 2182 | 2717 | 1.607 | 5.446 | 7.053 |
| 2.6 | 128.7 | 0.6927 | 541 | 2539 | 541 | 2178 | 2719 | 1.621 | 5.419 | 7.040 |
| 2.7 | 130.0 | 0.6686 | 546 | 2540 | 546 | 2174 | 2720 | 1.634 | 5.393 | 7.027 |
| 2.8 | 131.2 | 0.6462 | 551 | 2541 | 551 | 2171 | 2722 | 1.647 | 5.368 | 7.015 |
| 2.9 | 132.4 | 0.6253 | 556 | 2543 | 556 | 2168 | 2724 | 1.660 | 5.344 | 7.004 |
| 3.0 | 133.5 | 0.6057 | 561 | 2544 | 561 | 2164 | 2725 | 1.672 | 5.321 | 6.993 |
| 3.5 | 138.9 | 0.5241 | 584 | 2549 | 584 | 2148 | 2732 | 1.727 | 5.214 | 6.941 |
| 4.0 | 143.6 | 0.4623 | 605 | 2554 | 605 | 2134 | 2739 | 1.776 | 5.121 | 6.897 |
| 4.5 | 147.9 | 0.4139 | 623 | 2558 | 623 | 2121 | 2744 | 1.820 | 5.037 | 6.857 |
| 5.0 | 151.8 | 0.3748 | 639 | 2562 | 640 | 2109 | 2749 | 1.860 | 4.962 | 6.822 |
| 5.5 | 155.5 | 0.3427 | 655 | 2565 | 656 | 2097 | 2753 | 1.897 | 4.893 | 6.790 |
| 6 | 158.8 | 0.3156 | 669 | 2568 | 670 | 2087 | 2757 | 1.931 | 4.830 | 6.761 |
| 7 | 165.0 | 0.2728 | 696 | 2573 | 697 | 2067 | 2764 | 1.992 | 4.717 | 6.709 |
| 8 | 170.4 | 0.2403 | 720 | 2577 | 721 | 2048 | 2769 | 2.046 | 4.617 | 6.663 |
| 9 | 175.4 | 0.2149 | 742 | 2581 | 743 | 2031 | 2774 | 2.094 | 4.529 | 6.623 |
| 10 | 179.9 | 0.1944 | 762 | 2584 | 763 | 2015 | 2778 | 2.138 | 4.448 | 6.586 |
| 11 | 184.1 | 0.1774 | 780 | 2586 | 781 | 2000 | 2781 | 2.179 | 4.375 | 6.554 |
| 12 | 188.0 | 0.1632 | 797 | 2588 | 798 | 1986 | 2784 | 2.216 | 4.307 | 6.523 |
| 13 | 191.6 | 0.1512 | 813 | 2590 | 815 | 1972 | 2787 | 2.251 | 4.244 | 6.495 |
| 14 | 195.0 | 0.1408 | 828 | 2593 | 830 | 1960 | 2790 | 2.284 | 4.185 | 6.469 |
| 15 | 198.3 | 0.1317 | 843 | 2595 | 845 | 1947 | 2792 | 2.315 | 4.130 | 6.445 |
| 16 | 201.4 | 0.1237 | 857 | 2596 | 859 | 1935 | 2794 | 2.344 | 4.078 | 6.422 |
| 17 | 204.3 | 0.1167 | 870 | 2597 | 872 | 1923 | 2795 | 2.372 | 4.028 | 6.400 |
| 18 | 207.1 | 0.1104 | 883 | 2598 | 885 | 1912 | 2797 | 2.398 | 3.981 | 6.379 |
| 19 | 209.8 | 0.1047 | 895 | 2599 | 897 | 1901 | 2798 | 2.423 | 3.936 | 6.359 |
| 20 | 212.4 | 0.09957 | 907 | 2600 | 909 | 1890 | 2799 | 2.447 | 3.893 | 6.340 |
| 22 | 217.2 | 0.09069 | 928 | 2601 | 931 | 1870 | 2801 | 2.492 | 3.813 | 6.305 |
| 24 | 221.8 | 0.08323 | 949 | 2602 | 952 | 1850 | 2802 | 2.534 | 3.738 | 6.272 |
| 26 | 226.0 | 0.07689 | 969 | 2603 | 972 | 1831 | 2803 | 2.574 | 3.668 | 6.242 |
| 28 | 230.0 | 0.07142 | 988 | 2603 | 991 | 1812 | 2803 | 2.611 | 3.602 | 6.213 |
| 30 | 233.8 | 0.06665 | 1004 | 2603 | 1008 | 1795 | 2803 | 2.645 | 3.541 | 6.186 |
| 32 | 237.4 | 0.06246 | 1021 | 2603 | 1025 | 1778 | 2803 | 2.679 | 3.482 | 6.161 |
| 34 | 240.9 | 0.05875 | 1038 | 2603 | 1042 | 1761 | 2803 | 2.710 | 3.426 | 6.136 |
| 36 | 244.2 | 0.05544 | 1054 | 2602 | 1058 | 1744 | 2802 | 2.740 | 3.373 | 6.113 |
| 38 | 247.3 | 0.05246 | 1068 | 2602 | 1073 | 1729 | 2802 | 2.769 | 3.322 | 6.091 |
| 40 | 250.3 | 0.04977 | 1082 | 2602 | 1087 | 1714 | 2801 | 2.797 | 3.273 | 6.070 |





| $p$ [bar] | $t_s$ [°C] | $v_g$ [m³/kg] | $u_f$ [kJ/kg] | $u_g$ [kJ/kg] | $h_f$ [kJ/kg] | $h_{fg}$ [kJ/kg] | $h_g$ [kJ/kg] | $s_f$ [kJ/kg K] | $s_{fg}$ [kJ/kg K] | $s_g$ [kJ/kg K] |
|---|---|---|---|---|---|---|---|---|---|---|
| 40 | 250.3 | 0.04977 | 1082 | 2602 | 1087 | 1714 | 2801 | 2.797 | 3.273 | 6.070 |
| 42 | 253.2 | 0.04732 | 1097 | 2601 | 1102 | 1698 | 2800 | 2.823 | 3.226 | 6.049 |
| 44 | 256.0 | 0.04509 | 1109 | 2600 | 1115 | 1683 | 2798 | 2.849 | 3.180 | 6.029 |
| 46 | 258.8 | 0.04305 | 1123 | 2599 | 1129 | 1668 | 2797 | 2.874 | 3.136 | 6.010 |
| 48 | 261.4 | 0.04117 | 1136 | 2598 | 1142 | 1654 | 2796 | 2.897 | 3.094 | 5.991 |
| 50 | 263.9 | 0.03944 | 1149 | 2597 | 1155 | 1639 | 2794 | 2.921 | 3.052 | 5.973 |
| 55 | 269.9 | 0.03563 | 1178 | 2594 | 1185 | 1605 | 2790 | 2.976 | 2.955 | 5.931 |
| 60 | 275.6 | 0.03244 | 1206 | 2590 | 1214 | 1570 | 2784 | 3.027 | 2.863 | 5.890 |
| 65 | 280.8 | 0.02972 | 1232 | 2586 | 1241 | 1538 | 2779 | 3.076 | 2.775 | 5.851 |
| 70 | 285.8 | 0.02737 | 1258 | 2581 | 1267 | 1505 | 2772 | 3.122 | 2.692 | 5.814 |
| 75 | 290.5 | 0.02532 | 1283 | 2576 | 1293 | 1473 | 2766 | 3.166 | 2.613 | 5.779 |
| 80 | 295.0 | 0.02352 | 1306 | 2570 | 1317 | 1441 | 2758 | 3.207 | 2.537 | 5.744 |
| 85 | 299.2 | 0.02192 | 1329 | 2565 | 1341 | 1410 | 2751 | 3.248 | 2.463 | 5.711 |
| 90 | 303.3 | 0.02048 | 1351 | 2559 | 1364 | 1379 | 2743 | 3.286 | 2.393 | 5.679 |
| 95 | 307.2 | 0.01919 | 1372 | 2552 | 1386 | 1348 | 2734 | 3.324 | 2.323 | 5.647 |
| 100 | 311.0 | 0.01802 | 1393 | 2545 | 1408 | 1317 | 2725 | 3.360 | 2.255 | 5.615 |
| 105 | 314.6 | 0.01696 | 1414 | 2537 | 1429 | 1286 | 2715 | 3.395 | 2.189 | 5.584 |
| 110 | 318.0 | 0.01598 | 1434 | 2529 | 1450 | 1255 | 2705 | 3.430 | 2.123 | 5.553 |
| 115 | 321.4 | 0.01508 | 1454 | 2522 | 1471 | 1224 | 2695 | 3.463 | 2.060 | 5.523 |
| 120 | 324.6 | 0.01426 | 1473 | 2514 | 1491 | 1194 | 2685 | 3.496 | 1.997 | 5.493 |
| 125 | 327.8 | 0.01349 | 1492 | 2505 | 1511 | 1163 | 2674 | 3.529 | 1.934 | 5.463 |
| 130 | 330.8 | 0.01278 | 1511 | 2496 | 1531 | 1131 | 2662 | 3.561 | 1.872 | 5.433 |
| 135 | 333.8 | 0.01211 | 1530 | 2487 | 1551 | 1099 | 2650 | 3.592 | 1.811 | 5.403 |
| 140 | 336.6 | 0.01149 | 1548 | 2477 | 1571 | 1067 | 2638 | 3.623 | 1.750 | 5.373 |
| 145 | 339.4 | 0.01090 | 1567 | 2467 | 1591 | 1034 | 2625 | 3.654 | 1.689 | 5.343 |
| 150 | 342.1 | 0.01035 | 1585 | 2456 | 1610 | 1001 | 2611 | 3.685 | 1.627 | 5.312 |
| 155 | 344.8 | 0.00982 | 1604 | 2445 | 1630 | 967 | 2597 | 3.715 | 1.565 | 5.280 |
| 160 | 347.3 | 0.00932 | 1623 | 2433 | 1650 | 932 | 2582 | 3.746 | 1.502 | 5.248 |
| 165 | 349.8 | 0.00884 | 1641 | 2420 | 1670 | 895 | 2565 | 3.777 | 1.437 | 5.214 |
| 170 | 352.3 | 0.00838 | 1660 | 2406 | 1690 | 858 | 2548 | 3.808 | 1.373 | 5.181 |
| 175 | 354.6 | 0.00794 | 1679 | 2391 | 1711 | 819 | 2530 | 3.839 | 1.305 | 5.144 |
| 180 | 357.0 | 0.00751 | 1699 | 2375 | 1732 | 778 | 2510 | 3.872 | 1.236 | 5.108 |
| 185 | 359.2 | 0.00709 | 1719 | 2358 | 1754 | 735 | 2489 | 3.905 | 1.163 | 5.068 |
| 190 | 361.4 | 0.00668 | 1740 | 2339 | 1777 | 689 | 2466 | 3.941 | 1.086 | 5.027 |
| 195 | 363.6 | 0.00627 | 1762 | 2318 | 1801 | 639 | 2440 | 3.977 | 1.004 | 4.981 |
| 200 | 365.7 | 0.00585 | 1786 | 2294 | 1827 | 584 | 2411 | 4.014 | 0.914 | 4.928 |
| 202 | 366.5 | 0.00569 | 1796 | 2283 | 1838 | 560 | 2398 | 4.031 | 0.875 | 4.906 |
| 204 | 367.4 | 0.00552 | 1806 | 2271 | 1849 | 535 | 2384 | 4.049 | 0.835 | 4.884 |
| 206 | 368.2 | 0.00534 | 1817 | 2259 | 1861 | 508 | 2369 | 4.067 | 0.792 | 4.859 |
| 208 | 369.0 | 0.00517 | 1829 | 2245 | 1874 | 479 | 2353 | 4.087 | 0.745 | 4.832 |
| 210 | 369.8 | 0.00498 | 1842 | 2231 | 1889 | 447 | 2336 | 4.108 | 0.695 | 4.803 |
| 212 | 370.6 | 0.00479 | 1856 | 2214 | 1904 | 412 | 2316 | 4.131 | 0.640 | 4.771 |
| 214 | 371.4 | 0.00458 | 1871 | 2196 | 1921 | 373 | 2294 | 4.157 | 0.579 | 4.736 |
| 216 | 372.1 | 0.00436 | 1888 | 2174 | 1940 | 328 | 2268 | 4.186 | 0.508 | 4.694 |
| 218 | 372.9 | 0.00409 | 1911 | 2146 | 1965 | 270 | 2235 | 4.224 | 0.417 | 4.641 |
| 220 | 373.7 | 0.00368 | 1949 | 2097 | 2008 | 170 | 2178 | 4.289 | 0.263 | 4.552 |
| 221.2 | 374.15 | 0.00317 | 2014 | 2014 | 2084 | 0 | 2084 | 4.406 | 0.000 | 4.406 |