

# Approval

| Approved<br>By: | Checked<br>By: | Prepared<br>By : |
|-----------------|----------------|------------------|
|                 |                |                  |

| Approved<br>By: | Examined<br>By: | Tested<br>By : |
|-----------------|-----------------|----------------|
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| Company's<br><br>Stamp |  |
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| Company's<br><br>Stamp |  |
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Approval No. : \_\_\_\_\_

Product : NTC THERMISTOR SENSORS

Mayloon Part No. : MLHT 502F- 3970

Customer's Part No. : \_\_\_\_\_

Specifications : R<sub>25</sub> 5,000 Ω ± 1 %

B<sub>25-85</sub> 3970 °K ± 1 %

Date : 2007/05/10

1) SCOPE

This specifications define ratings, dimension, insulation, climatic sequence and mechanical characteristics for **(Lead-free)** MLHT type thermistor.

2) PART NO. : MLHT502F-3970

3) RATING

3-1) Rated zero-power resistance  $R_{25}$  : 5 k $\Omega$   $\pm 1$  % (at 25 $^{\circ}$ C)

3-2) B value.  $B_{25/85}$  : 3,970K  $\pm 1$  %

\*The B value is calculated using the zero-power resistance values measured at 25 $^{\circ}$ C and 85 $^{\circ}$ C.

3-3) Dissipation factor. : Approx. 2 mW/ $^{\circ}$ C (in air)

3-4) Thermal time constant. : Approx.  $\leq 12$  Sec (in air)

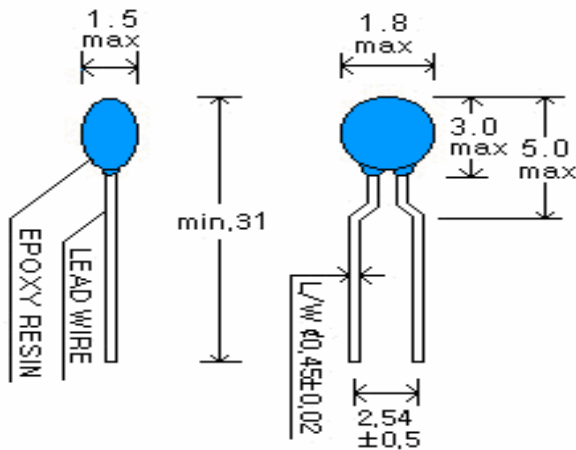
3-5) Maximum power rating. : 10 mW (at 25 $^{\circ}$ C)

3-6) Category temperature range : -30 ~ 125  $^{\circ}$ C

3-7) Lead content : **RoHs Compliant.**

3-8) Cadmium : **RoHs Compliant.**

4) DIMENSIONS UNIT: mm



| Spec.No.: STANDARD |         | Note  |  | REVISION |  |
|--------------------|---------|-------|--|----------|--|
| Date:              |         |       |  | A        |  |
| Approved           | Checked | Drawn |  | B        |  |
|                    |         |       |  | C        |  |

## 5) Insulation

### 5-1) Insulation resistance

Insulation resistance of the test samples shall be over 100M $\Omega$  when it is measured at DC 500V between coated area and lead wires.

## 6) Climatic test

### 6-1) Dry Heat

After the test samples were exposed in air at 110 °C for 1,000 hours, the change ratio of the rated zero-power resistance shall be within  $\pm 1\%$  of the initial value.

### 6-2) Damp heat

After the test samples were exposed in the humidity of 95% at 40°C for 1,000 hours, the change ratio of the rated zero-power resistance shall be within  $\pm 1\%$  of the initial value.

### 6-3) Cold

After the test samples were exposed in air at -30°C for 1,000 hours, the change ratio of the rated zero-power resistance shall be within  $\pm 1\%$  of the initial value.

### 6-4) Humidity load

After DC 1mA current was applied to the test samples in the temperature of 40°C and the humidity of 95% for 1,000 hours, the change ratio of the rated zero-power resistance shall be within  $\pm 1\%$  of the initial value.

### 6-5) Change of temperature

One cycle of the change of temperature shall be carried out in the order of the following conditions.

.Room ambient temperature.( Initial value)

.At -30°C, for 30 minutes.

.Room ambient temperature, for 3 minutes.

.At + 90°C, for 30 minutes.

.Room ambient temperature, for 3 minutes.

After 100 cycles of change of temperature, the change ratio of the rated zero-power resistance shall be within  $\pm 1\%$  of the initial value.

#### 6-6) High temperature load

After DC 1mA current was applied to the test samples in the temperature of 110°C for 1,000 hours, the change ratio of the rated zero-power resistance shall be within  $\pm 1\%$  of the initial value.

### 7) Mechanical characteristics

#### 7-1) Robustness of terminations

Ua: Tensile

After 2N loading weight for 3 seconds was applied to the wire terminations, there shall be no visible damage.

#### 7-2) Free fall

After one time natural fall to a maple board from 1m high, there shall be no visible damage.

#### 7-3) Resistance to soldering heat

After lead wire of the test samples were dipped on time within 8.5 mm from end of lead wire in solder bath at 260°C  $\pm 10\%$  for 10  $\pm 0.5$  seconds, the change ratio of the rated zero-power resistance shall be within  $\pm 1\%$  of the initial value.

### 8) R-T characteristics

PART NO.:

**MLHT502F-3970**

**R25 : 5 K $\Omega$   $\pm 1\%$**

**B25/85 : 3,970K  $\pm 1\%$**

| Temperature<br>(°C) | Resistance ( $\Omega$ ) |        |        | Temp.<br>Coef.<br>(%/°C) | Resist. Tolerance<br>(%) |      | Temp. Tolerance (°C) |      |
|---------------------|-------------------------|--------|--------|--------------------------|--------------------------|------|----------------------|------|
|                     | MIN.                    | CENTER | MAX.   |                          | MIN.                     | MAX. | MIN.                 | MAX. |
| <b>-40</b>          | 164963                  | 172637 | 180650 | -6.81                    | -4.44                    | 4.64 | -0.68                | 0.65 |
| <b>-39</b>          | 154250                  | 161316 | 168689 | -6.76                    | -4.38                    | 4.57 | -0.68                | 0.65 |
| <b>-38</b>          | 144308                  | 150817 | 157603 | -6.70                    | -4.32                    | 4.50 | -0.67                | 0.64 |
| <b>-37</b>          | 135076                  | 141074 | 147324 | -6.65                    | -4.25                    | 4.43 | -0.67                | 0.64 |
| <b>-36</b>          | 126499                  | 132029 | 137787 | -6.60                    | -4.19                    | 4.36 | -0.66                | 0.63 |
| <b>-35</b>          | 118526                  | 123626 | 128933 | -6.55                    | -4.13                    | 4.29 | -0.66                | 0.63 |
| <b>-34</b>          | 111111                  | 115816 | 120709 | -6.50                    | -4.06                    | 4.22 | -0.65                | 0.62 |
| <b>-33</b>          | 104211                  | 108554 | 113066 | -6.45                    | -4.00                    | 4.16 | -0.64                | 0.62 |
| <b>-32</b>          | 97786                   | 101796 | 105959 | -6.40                    | -3.94                    | 4.09 | -0.64                | 0.62 |
| <b>-31</b>          | 91802                   | 95505  | 99348  | -6.36                    | -3.88                    | 4.02 | -0.63                | 0.61 |

|     |       |       |       |       |       |      |       |      |
|-----|-------|-------|-------|-------|-------|------|-------|------|
| -30 | 86224 | 89646 | 93194 | -6.31 | -3.82 | 3.96 | -0.63 | 0.61 |
| -29 | 81023 | 84185 | 87462 | -6.26 | -3.76 | 3.89 | -0.62 | 0.60 |
| -28 | 76171 | 79094 | 82122 | -6.21 | -3.70 | 3.83 | -0.62 | 0.59 |
| -27 | 71642 | 74345 | 77143 | -6.17 | -3.64 | 3.76 | -0.61 | 0.59 |
| -26 | 67412 | 69913 | 72500 | -6.12 | -3.58 | 3.70 | -0.60 | 0.58 |
| -25 | 63461 | 65775 | 68167 | -6.08 | -3.52 | 3.64 | -0.60 | 0.58 |
| -24 | 59767 | 61909 | 64121 | -6.04 | -3.46 | 3.57 | -0.59 | 0.57 |
| -23 | 56312 | 58296 | 60343 | -5.99 | -3.40 | 3.51 | -0.59 | 0.57 |
| -22 | 53080 | 54917 | 56811 | -5.95 | -3.34 | 3.45 | -0.58 | 0.56 |
| -21 | 50055 | 51756 | 53510 | -5.91 | -3.29 | 3.39 | -0.57 | 0.56 |
| -20 | 47222 | 48798 | 50422 | -5.86 | -3.23 | 3.33 | -0.57 | 0.55 |
| -19 | 44567 | 46028 | 47532 | -5.82 | -3.17 | 3.27 | -0.56 | 0.54 |
| -18 | 42079 | 43433 | 44826 | -5.78 | -3.12 | 3.21 | -0.55 | 0.54 |
| -17 | 39746 | 41002 | 42292 | -5.74 | -3.06 | 3.15 | -0.55 | 0.53 |
| -16 | 37558 | 38722 | 39918 | -5.70 | -3.01 | 3.09 | -0.54 | 0.53 |
| -15 | 35504 | 36583 | 37692 | -5.66 | -2.95 | 3.03 | -0.54 | 0.52 |
| -14 | 33575 | 34576 | 35604 | -5.62 | -2.90 | 2.97 | -0.53 | 0.52 |
| -13 | 31763 | 32692 | 33645 | -5.58 | -2.84 | 2.91 | -0.52 | 0.51 |
| -12 | 30061 | 30923 | 31806 | -5.55 | -2.79 | 2.86 | -0.52 | 0.50 |
| -11 | 28460 | 29260 | 30080 | -5.51 | -2.73 | 2.80 | -0.51 | 0.50 |
| -10 | 26955 | 27698 | 28458 | -5.47 | -2.68 | 2.74 | -0.50 | 0.49 |
| -9  | 25539 | 26228 | 26933 | -5.43 | -2.63 | 2.69 | -0.49 | 0.48 |
| -8  | 24206 | 24846 | 25500 | -5.40 | -2.57 | 2.63 | -0.49 | 0.48 |
| -7  | 22951 | 23545 | 24152 | -5.36 | -2.52 | 2.58 | -0.48 | 0.47 |
| -6  | 21769 | 22320 | 22883 | -5.32 | -2.47 | 2.52 | -0.47 | 0.46 |
| -5  | 20655 | 21167 | 21689 | -5.29 | -2.42 | 2.47 | -0.47 | 0.46 |
| -4  | 19605 | 20080 | 20565 | -5.25 | -2.37 | 2.41 | -0.46 | 0.45 |
| -3  | 18614 | 19056 | 19505 | -5.22 | -2.32 | 2.36 | -0.45 | 0.44 |
| -2  | 17680 | 18090 | 18507 | -5.18 | -2.26 | 2.31 | -0.45 | 0.44 |
| -1  | 16798 | 17179 | 17566 | -5.15 | -2.21 | 2.25 | -0.44 | 0.43 |
| 0   | 15966 | 16319 | 16679 | -5.12 | -2.16 | 2.20 | -0.43 | 0.42 |
| 1   | 15180 | 15508 | 15841 | -5.08 | -2.11 | 2.15 | -0.42 | 0.42 |
| 2   | 14437 | 14742 | 15051 | -5.05 | -2.06 | 2.10 | -0.42 | 0.41 |
| 3   | 13735 | 14018 | 14305 | -5.02 | -2.02 | 2.05 | -0.41 | 0.40 |
| 4   | 13072 | 13334 | 13600 | -4.99 | -1.97 | 2.00 | -0.40 | 0.39 |
| 5   | 12444 | 12688 | 12934 | -4.95 | -1.92 | 1.94 | -0.39 | 0.39 |
| 6   | 11851 | 12076 | 12305 | -4.92 | -1.87 | 1.89 | -0.38 | 0.38 |
| 7   | 11289 | 11498 | 11710 | -4.89 | -1.82 | 1.84 | -0.38 | 0.37 |
| 8   | 10757 | 10951 | 11148 | -4.86 | -1.77 | 1.79 | -0.37 | 0.36 |

|    |       |       |       |       |       |      |       |      |
|----|-------|-------|-------|-------|-------|------|-------|------|
| 9  | 10253 | 10433 | 10615 | -4.83 | -1.73 | 1.75 | -0.36 | 0.36 |
| 10 | 9776  | 9943  | 10112 | -4.80 | -1.68 | 1.70 | -0.35 | 0.35 |
| 11 | 9324  | 9479  | 9635  | -4.77 | -1.63 | 1.65 | -0.35 | 0.34 |
| 12 | 8895  | 9038  | 9183  | -4.74 | -1.58 | 1.60 | -0.34 | 0.33 |
| 13 | 8489  | 8621  | 8755  | -4.71 | -1.54 | 1.55 | -0.33 | 0.33 |
| 14 | 8103  | 8226  | 8350  | -4.68 | -1.49 | 1.50 | -0.32 | 0.32 |
| 15 | 7738  | 7851  | 7965  | -4.65 | -1.45 | 1.46 | -0.31 | 0.31 |
| 16 | 7390  | 7495  | 7601  | -4.62 | -1.40 | 1.41 | -0.30 | 0.30 |
| 17 | 7061  | 7158  | 7255  | -4.59 | -1.35 | 1.36 | -0.30 | 0.29 |
| 18 | 6748  | 6837  | 6927  | -4.57 | -1.31 | 1.32 | -0.29 | 0.29 |
| 19 | 6450  | 6533  | 6616  | -4.54 | -1.26 | 1.27 | -0.28 | 0.28 |
| 20 | 6168  | 6244  | 6320  | -4.51 | -1.22 | 1.22 | -0.27 | 0.27 |
| 21 | 5899  | 5969  | 6040  | -4.48 | -1.18 | 1.18 | -0.26 | 0.26 |
| 22 | 5644  | 5708  | 5773  | -4.46 | -1.13 | 1.13 | -0.25 | 0.25 |
| 23 | 5401  | 5460  | 5520  | -4.43 | -1.09 | 1.09 | -0.25 | 0.25 |
| 24 | 5170  | 5224  | 5279  | -4.40 | -1.04 | 1.04 | -0.24 | 0.24 |
| 25 | 4950  | 5000  | 5050  | -4.38 | -1.00 | 1.00 | -0.23 | 0.23 |
| 26 | 4737  | 4786  | 4836  | -4.35 | -1.04 | 1.04 | -0.24 | 0.24 |
| 27 | 4533  | 4583  | 4633  | -4.33 | -1.09 | 1.09 | -0.25 | 0.25 |
| 28 | 4340  | 4390  | 4439  | -4.30 | -1.13 | 1.13 | -0.26 | 0.26 |
| 29 | 4156  | 4206  | 4255  | -4.27 | -1.17 | 1.17 | -0.27 | 0.27 |
| 30 | 3981  | 4030  | 4079  | -4.25 | -1.21 | 1.22 | -0.29 | 0.29 |
| 31 | 3814  | 3863  | 3912  | -4.23 | -1.26 | 1.26 | -0.30 | 0.30 |
| 32 | 3655  | 3703  | 3752  | -4.20 | -1.30 | 1.30 | -0.31 | 0.31 |
| 33 | 3504  | 3552  | 3599  | -4.18 | -1.34 | 1.35 | -0.32 | 0.32 |
| 34 | 3360  | 3407  | 3454  | -4.15 | -1.38 | 1.39 | -0.33 | 0.33 |
| 35 | 3222  | 3269  | 3315  | -4.13 | -1.42 | 1.43 | -0.35 | 0.34 |
| 36 | 3091  | 3137  | 3183  | -4.10 | -1.46 | 1.47 | -0.36 | 0.36 |
| 37 | 2966  | 3011  | 3057  | -4.08 | -1.50 | 1.51 | -0.37 | 0.37 |
| 38 | 2846  | 2891  | 2936  | -4.06 | -1.54 | 1.55 | -0.38 | 0.38 |
| 39 | 2732  | 2776  | 2821  | -4.03 | -1.58 | 1.60 | -0.40 | 0.39 |
| 40 | 2624  | 2667  | 2710  | -4.01 | -1.62 | 1.64 | -0.41 | 0.40 |
| 41 | 2520  | 2562  | 2605  | -3.99 | -1.66 | 1.68 | -0.42 | 0.42 |
| 42 | 2420  | 2462  | 2505  | -3.97 | -1.70 | 1.72 | -0.43 | 0.43 |
| 43 | 2326  | 2367  | 2408  | -3.94 | -1.74 | 1.76 | -0.45 | 0.44 |
| 44 | 2235  | 2275  | 2316  | -3.92 | -1.78 | 1.80 | -0.46 | 0.45 |
| 45 | 2148  | 2188  | 2228  | -3.90 | -1.81 | 1.84 | -0.47 | 0.47 |
| 46 | 2066  | 2105  | 2144  | -3.88 | -1.85 | 1.88 | -0.48 | 0.48 |
| 47 | 1987  | 2025  | 2064  | -3.86 | -1.89 | 1.92 | -0.50 | 0.49 |

|    |      |      |      |       |       |      |       |      |
|----|------|------|------|-------|-------|------|-------|------|
| 48 | 1911 | 1948 | 1987 | -3.84 | -1.93 | 1.96 | -0.51 | 0.50 |
| 49 | 1838 | 1875 | 1913 | -3.82 | -1.97 | 2.00 | -0.52 | 0.52 |
| 50 | 1769 | 1805 | 1842 | -3.79 | -2.00 | 2.03 | -0.54 | 0.53 |
| 51 | 1703 | 1738 | 1774 | -3.77 | -2.04 | 2.07 | -0.55 | 0.54 |
| 52 | 1639 | 1674 | 1709 | -3.75 | -2.08 | 2.11 | -0.56 | 0.55 |
| 53 | 1578 | 1613 | 1647 | -3.73 | -2.11 | 2.15 | -0.58 | 0.57 |
| 54 | 1520 | 1554 | 1588 | -3.71 | -2.15 | 2.19 | -0.59 | 0.58 |
| 55 | 1464 | 1497 | 1530 | -3.69 | -2.19 | 2.23 | -0.60 | 0.59 |
| 56 | 1411 | 1443 | 1476 | -3.67 | -2.22 | 2.26 | -0.62 | 0.61 |
| 57 | 1360 | 1391 | 1423 | -3.65 | -2.26 | 2.30 | -0.63 | 0.62 |
| 58 | 1311 | 1341 | 1373 | -3.63 | -2.29 | 2.34 | -0.64 | 0.63 |
| 59 | 1263 | 1294 | 1324 | -3.61 | -2.33 | 2.37 | -0.66 | 0.64 |
| 60 | 1218 | 1248 | 1278 | -3.59 | -2.36 | 2.41 | -0.67 | 0.66 |
| 61 | 1175 | 1204 | 1233 | -3.58 | -2.40 | 2.45 | -0.68 | 0.67 |
| 62 | 1133 | 1162 | 1191 | -3.56 | -2.43 | 2.48 | -0.70 | 0.68 |
| 63 | 1094 | 1121 | 1150 | -3.54 | -2.47 | 2.52 | -0.71 | 0.70 |
| 64 | 1055 | 1082 | 1110 | -3.52 | -2.50 | 2.56 | -0.73 | 0.71 |
| 65 | 1019 | 1045 | 1072 | -3.50 | -2.54 | 2.59 | -0.74 | 0.72 |
| 66 | 983  | 1009 | 1036 | -3.48 | -2.57 | 2.63 | -0.76 | 0.74 |
| 67 | 949  | 975  | 1001 | -3.46 | -2.61 | 2.66 | -0.77 | 0.75 |
| 68 | 917  | 942  | 967  | -3.45 | -2.64 | 2.70 | -0.78 | 0.77 |
| 69 | 885  | 910  | 935  | -3.43 | -2.67 | 2.74 | -0.80 | 0.78 |
| 70 | 855  | 879  | 904  | -3.41 | -2.71 | 2.77 | -0.81 | 0.79 |
| 71 | 827  | 850  | 874  | -3.39 | -2.74 | 2.81 | -0.83 | 0.81 |
| 72 | 799  | 822  | 845  | -3.38 | -2.77 | 2.84 | -0.84 | 0.82 |
| 73 | 772  | 794  | 817  | -3.36 | -2.80 | 2.88 | -0.86 | 0.84 |
| 74 | 746  | 768  | 791  | -3.34 | -2.84 | 2.91 | -0.87 | 0.85 |
| 75 | 722  | 743  | 765  | -3.32 | -2.87 | 2.94 | -0.89 | 0.86 |
| 76 | 698  | 719  | 740  | -3.31 | -2.90 | 2.98 | -0.90 | 0.88 |
| 77 | 675  | 695  | 716  | -3.29 | -2.93 | 3.01 | -0.92 | 0.89 |
| 78 | 653  | 673  | 693  | -3.27 | -2.97 | 3.05 | -0.93 | 0.91 |
| 79 | 632  | 651  | 671  | -3.26 | -3.00 | 3.08 | -0.95 | 0.92 |
| 80 | 611  | 631  | 650  | -3.24 | -3.03 | 3.11 | -0.96 | 0.93 |
| 81 | 592  | 610  | 630  | -3.22 | -3.06 | 3.15 | -0.98 | 0.95 |
| 82 | 573  | 591  | 610  | -3.21 | -3.09 | 3.18 | -0.99 | 0.96 |
| 83 | 555  | 573  | 591  | -3.19 | -3.12 | 3.21 | -1.01 | 0.98 |
| 84 | 537  | 555  | 573  | -3.18 | -3.15 | 3.25 | -1.02 | 0.99 |
| 85 | 520  | 537  | 555  | -3.16 | -3.18 | 3.28 | -1.04 | 1.01 |
| 86 | 504  | 521  | 538  | -3.15 | -3.21 | 3.31 | -1.05 | 1.02 |

|     |     |     |     |       |       |      |       |      |
|-----|-----|-----|-----|-------|-------|------|-------|------|
| 87  | 488 | 505 | 521 | -3.13 | -3.24 | 3.34 | -1.07 | 1.04 |
| 88  | 473 | 489 | 506 | -3.11 | -3.28 | 3.38 | -1.08 | 1.05 |
| 89  | 458 | 474 | 490 | -3.10 | -3.31 | 3.41 | -1.10 | 1.07 |
| 90  | 444 | 460 | 475 | -3.08 | -3.33 | 3.44 | -1.12 | 1.08 |
| 91  | 431 | 446 | 461 | -3.07 | -3.36 | 3.47 | -1.13 | 1.10 |
| 92  | 418 | 432 | 447 | -3.05 | -3.39 | 3.50 | -1.15 | 1.11 |
| 93  | 405 | 419 | 434 | -3.04 | -3.42 | 3.53 | -1.16 | 1.13 |
| 94  | 393 | 407 | 421 | -3.02 | -3.45 | 3.57 | -1.18 | 1.14 |
| 95  | 381 | 395 | 409 | -3.01 | -3.48 | 3.60 | -1.20 | 1.16 |
| 96  | 370 | 383 | 397 | -3.00 | -3.51 | 3.63 | -1.21 | 1.17 |
| 97  | 359 | 372 | 385 | -2.98 | -3.54 | 3.66 | -1.23 | 1.19 |
| 98  | 348 | 361 | 374 | -2.97 | -3.57 | 3.69 | -1.24 | 1.20 |
| 99  | 338 | 350 | 363 | -2.95 | -3.60 | 3.72 | -1.26 | 1.22 |
| 100 | 328 | 340 | 353 | -2.94 | -3.63 | 3.75 | -1.28 | 1.23 |
| 101 | 318 | 330 | 343 | -2.92 | -3.65 | 3.78 | -1.29 | 1.25 |
| 102 | 309 | 321 | 333 | -2.91 | -3.68 | 3.81 | -1.31 | 1.26 |
| 103 | 300 | 312 | 324 | -2.90 | -3.71 | 3.84 | -1.33 | 1.28 |
| 104 | 291 | 303 | 314 | -2.88 | -3.74 | 3.87 | -1.34 | 1.30 |
| 105 | 283 | 294 | 306 | -2.87 | -3.77 | 3.90 | -1.36 | 1.31 |
| 106 | 275 | 286 | 297 | -2.86 | -3.79 | 3.93 | -1.38 | 1.33 |
| 107 | 267 | 278 | 289 | -2.84 | -3.82 | 3.96 | -1.39 | 1.34 |
| 108 | 260 | 270 | 281 | -2.83 | -3.85 | 3.99 | -1.41 | 1.36 |
| 109 | 252 | 263 | 273 | -2.82 | -3.87 | 4.02 | -1.43 | 1.38 |
| 110 | 245 | 255 | 266 | -2.80 | -3.90 | 4.05 | -1.44 | 1.39 |
| 111 | 238 | 248 | 258 | -2.79 | -3.93 | 4.08 | -1.46 | 1.41 |
| 112 | 232 | 241 | 251 | -2.78 | -3.96 | 4.11 | -1.48 | 1.42 |
| 113 | 225 | 235 | 245 | -2.77 | -3.98 | 4.14 | -1.50 | 1.44 |
| 114 | 219 | 228 | 238 | -2.75 | -4.01 | 4.17 | -1.51 | 1.46 |
| 115 | 213 | 222 | 232 | -2.74 | -4.03 | 4.19 | -1.53 | 1.47 |
| 116 | 207 | 216 | 225 | -2.73 | -4.06 | 4.22 | -1.55 | 1.49 |
| 117 | 202 | 210 | 219 | -2.71 | -4.09 | 4.25 | -1.57 | 1.51 |
| 118 | 196 | 205 | 214 | -2.70 | -4.11 | 4.28 | -1.58 | 1.52 |
| 119 | 191 | 199 | 208 | -2.69 | -4.14 | 4.31 | -1.60 | 1.54 |
| 120 | 186 | 194 | 202 | -2.68 | -4.16 | 4.34 | -1.62 | 1.56 |
| 121 | 181 | 189 | 197 | -2.67 | -4.19 | 4.36 | -1.64 | 1.57 |
| 122 | 176 | 184 | 192 | -2.65 | -4.22 | 4.39 | -1.65 | 1.59 |
| 123 | 172 | 179 | 187 | -2.64 | -4.24 | 4.42 | -1.67 | 1.61 |
| 124 | 167 | 175 | 182 | -2.63 | -4.27 | 4.45 | -1.69 | 1.62 |
| 125 | 163 | 170 | 178 | -2.62 | -4.29 | 4.47 | -1.71 | 1.64 |