| Wavelength (nm) 5 pH | 5.5 pH               | 6 pH                 | 6.5 pH                 | 7 pH                 | 7.5 pH                 | 8 pH                   |                      |
|----------------------|----------------------|----------------------|------------------------|----------------------|------------------------|------------------------|----------------------|
| 380.5                | 4.52E-02             | 4.87E-02             | 7.62E-03               | 5.18E-02             | -3.60E-03              | 1.03E-02               | 7.06E-03             |
| 381.6                | 4.61E-02             | 5.05E-02             | 9.20E-03               | 4.97E-02             | -2.70E-03              | 1.08E-02               | 8.42E-03             |
| 382.8                | 4.99E-02             | 5.44E-02             | 1.41E-02               | 5.13E-02             | 1.19E-03               | 1.22E-02               | 1.01E-02             |
| 383.9                | 4.90E-02             | 5.54E-02             | 1.24E-02               | 5.35E-02             | -2.07E-03              | 8.39E-03               | 9.37E-03             |
| 385.1                | 4.64E-02             | 5.49E-02             | 1.20E-02               | 5.67E-02             | -1.65E-03              | 5.92E-03               | 7.84E-03             |
| 386.2<br>387.4       | 4.65E-02<br>4.49E-02 | 5.34E-02<br>5.32E-02 | 1.20E-02<br>1.27E-02   | 5.97E-02<br>5.74E-02 | -1.96E-03<br>-4.85E-04 | 6.34E-03<br>7.96E-03   | 9.17E-03<br>9.28E-03 |
| 388.5                | 4.23E-02             | 5.11E-02             | 1.05E-02               | 5.39E-02             | -1.98E-03              | 8.20E-03               | 8.27E-03             |
| 389.7                | 4.13E-02             | 5.05E-02             | 9.25E-03               | 5.06E-02             | -9.58E-04              | 7.42E-03               | 9.22E-03             |
| 390.8                | 4.19E-02             | 4.83E-02             | 8.75E-03               | 4.81E-02             | -9.29E-05              | 6.51E-03               | 1.10E-02             |
| 392                  | 4.62E-02             | 4.95E-02             | 1.21E-02               | 4.69E-02             | 2.29E-03               | 8.82E-03               | 1.73E-02             |
| 393.1                | 4.66E-02             | 4.85E-02             | 1.17E-02               | 4.44E-02             | 6.16E-04               | 8.70E-03               | 2.14E-02             |
| 394.3                | 4.77E-02             | 4.75E-02             | 1.16E-02               | 4.31E-02             | 1.21E-03               | 9.98E-03               | 2.73E-02             |
| 395.4<br>396.6       | 4.91E-02<br>5.12E-02 | 4.62E-02<br>4.49E-02 | 1.15E-02<br>1.21E-02   | 4.16E-02<br>4.10E-02 | 5.14E-04<br>1.33E-03   | 1.11E-02<br>1.38E-02   | 3.32E-02<br>3.85E-02 |
| 397.7                | 5.20E-02             | 4.31E-02             | 1.16E-02               | 3.98E-02             | 3.07E-04               | 1.74E-02               | 4.28E-02             |
| 398.9                | 5.19E-02             | 4.07E-02             | 1.01E-02               | 3.92E-02             | 2.18E-04               | 1.91E-02               | 4.43E-02             |
| 400                  | 5.12E-02             | 3.97E-02             | 7.87E-03               | 3.91E-02             | -5.97E-04              | 1.98E-02               | 4.54E-02             |
| 401.2                | 5.10E-02             | 4.02E-02             | 6.38E-03               | 3.95E-02             | -2.89E-04              | 1.87E-02               | 4.50E-02             |
| 402.3                | 5.10E-02             | 4.12E-02             | 4.60E-03               | 4.11E-02             | 8.46E-04               | 1.80E-02               | 4.57E-02             |
| 403.5                | 5.16E-02             | 4.24E-02             | 2.95E-03               | 4.05E-02             | 9.65E-04               | 1.54E-02               | 4.45E-02             |
| 404.6<br>405.8       | 5.17E-02<br>5.14E-02 | 4.37E-02<br>4.54E-02 | 7.81E-04<br>-1.08E-03  | 4.00E-02<br>3.97E-02 | 6.42E-04               | 1.24E-02<br>9.10E-03   | 4.30E-02<br>4.18E-02 |
| 406.9                | 5.06E-02             | 4.73E-02             | -1.08E-03<br>-2.79E-03 | 4.00E-02             | -6.14E-06<br>1.53E-04  | 6.56E-03               | 4.10E-02             |
| 408.1                | 5.07E-02             | 4.84E-02             | -4.20E-03              | 4.08E-02             | 4.90E-04               | 4.33E-03               | 4.13E-02             |
| 409.2                | 5.00E-02             | 4.94E-02             | -5.88E-03              | 3.97E-02             | 1.73E-04               | 2.37E-03               | 3.95E-02             |
| 410.4                | 4.97E-02             | 4.92E-02             | -6.59E-03              | 3.99E-02             | 3.26E-04               | 1.26E-03               | 3.91E-02             |
| 411.5                | 4.90E-02             | 4.98E-02             | -7.39E-03              | 3.92E-02             | 5.38E-04               | 9.04E-04               | 3.82E-02             |
| 412.7                | 4.89E-02             | 5.00E-02             | -7.37E-03              | 3.91E-02             | 8.25E-05               | -5.77E-04              | 3.83E-02             |
| 413.8                | 4.76E-02             | 4.98E-02             | -8.29E-03              | 3.73E-02             | -5.31E-05              | -2.59E-03              | 3.77E-02             |
| 415<br>416.1         | 4.75E-02<br>4.70E-02 | 5.00E-02<br>5.02E-02 | -8.32E-03<br>-8.94E-03 | 3.72E-02<br>3.67E-02 | 4.39E-04<br>7.27E-04   | -4.56E-03<br>-4.83E-03 | 3.70E-02<br>3.65E-02 |
| 417.3                | 4.72E-02             | 5.11E-02             | -8.60E-03              | 3.74E-02             | 1.22E-03               | -4.72E-03              | 3.66E-02             |
| 418.4                | 4.69E-02             | 5.17E-02             | -8.35E-03              | 3.75E-02             | 9.87E-04               | -4.32E-03              | 3.70E-02             |
| 419.6                | 4.67E-02             | 5.21E-02             | -7.63E-03              | 3.72E-02             | 1.38E-03               | -4.71E-03              | 3.71E-02             |
| 420.7                | 4.63E-02             | 5.18E-02             | -7.24E-03              | 3.70E-02             | 1.04E-03               | -4.88E-03              | 3.62E-02             |
| 421.9                | 4.61E-02             | 5.16E-02             | -6.81E-03              | 3.64E-02             | 1.41E-03               | -4.82E-03              | 3.57E-02             |
| 423<br>424.2         | 4.55E-02             | 5.07E-02             | -7.07E-03              | 3.58E-02<br>3.52E-02 | 6.72E-04               | -4.88E-03              | 3.48E-02<br>3.51E-02 |
| 425.3                | 4.54E-02<br>4.48E-02 | 5.08E-02<br>5.01E-02 | -6.84E-03<br>-7.18E-03 | 3.54E-02             | 9.72E-04<br>3.55E-04   | -4.86E-03<br>-4.35E-03 | 3.49E-02             |
| 426.5                | 4.44E-02             | 4.98E-02             | -6.85E-03              | 3.62E-02             | 7.83E-04               | -4.45E-03              | 3.45E-02             |
| 427.6                | 4.41E-02             | 4.89E-02             | -6.99E-03              | 3.60E-02             | 1.21E-03               | -4.45E-03              | 3.40E-02             |
| 428.8                | 4.34E-02             | 4.91E-02             | -6.65E-03              | 3.55E-02             | 1.66E-03               | -5.45E-03              | 3.36E-02             |
| 429.9                | 4.37E-02             | 4.95E-02             | -5.77E-03              | 3.50E-02             | 1.54E-03               | -5.37E-03              | 3.42E-02             |
| 431.1                | 4.35E-02             | 4.98E-02             | -4.99E-03              | 3.54E-02             | 8.12E-04               | -5.23E-03              | 3.45E-02             |
| 432.2                | 4.36E-02             | 4.90E-02             | -4.31E-03              | 3.49E-02             | -4.56E-06              | -5.30E-03              | 3.44E-02             |
| 433.4<br>434.5       | 4.31E-02<br>4.30E-02 | 4.80E-02<br>4.81E-02 | -4.74E-03<br>-3.98E-03 | 3.44E-02<br>3.44E-02 | -9.04E-04<br>-8.52E-04 | -5.11E-03<br>-4.70E-03 | 3.40E-02<br>3.37E-02 |
| 435.7                | 4.26E-02             | 4.78E-02             | -3.92E-03              | 3.47E-02             | -6.86E-04              | -4.94E-03              | 3.32E-02             |
| 436.8                | 4.27E-02             | 4.84E-02             | -3.27E-03              | 3.56E-02             | 6.94E-04               | -5.37E-03              | 3.26E-02             |
| 438                  | 4.30E-02             | 4.78E-02             | -3.17E-03              | 3.53E-02             | 8.87E-04               | -5.57E-03              | 3.28E-02             |
| 439.1                | 4.32E-02             | 4.81E-02             | -2.53E-03              | 3.50E-02             | 8.77E-04               | -5.66E-03              | 3.28E-02             |
| 440.3                | 4.27E-02             | 4.77E-02             | -2.87E-03              | 3.37E-02             | 2.92E-04               | -5.48E-03              | 3.25E-02             |
| 441.4<br>442.6       | 4.21E-02<br>4.19E-02 | 4.80E-02<br>4.73E-02 | -2.84E-03<br>-2.66E-03 | 3.37E-02             | 4.30E-04<br>4.77E-04   | -5.35E-03<br>-4.75E-03 | 3.22E-02<br>3.20E-02 |
| 443.7                | 4.17E-02             | 4.73E-02<br>4.66E-02 | -2.45E-03              | 3.39E-02<br>3.43E-02 | 5.09E-04               | -4.87E-03              | 3.19E-02             |
| 444.9                | 4.19E-02             | 4.61E-02             | -2.34E-03              | 3.40E-02             | 1.03E-03               | -5.06E-03              | 3.17E-02             |
| 446                  | 4.22E-02             | 4.60E-02             | -2.45E-03              | 3.41E-02             | 1.08E-03               | -4.27E-03              | 3.19E-02             |
| 447.2                | 4.28E-02             | 4.65E-02             | -1.48E-03              | 3.41E-02             | 1.77E-03               | -3.57E-03              | 3.26E-02             |
| 448.3                | 4.17E-02             | 4.57E-02             | -7.09E-04              | 3.37E-02             | 7.37E-04               | -3.82E-03              | 3.23E-02             |
| 449.5                | 4.06E-02             | 4.50E-02             | -7.70E-04              | 3.26E-02             | 3.01E-04               | -4.62E-03              | 3.11E-02             |
| 450.6<br>451.8       | 4.02E-02             | 4.44E-02             | -3.00E-04              | 3.32E-02<br>3.28E-02 | 2.78E-05               | -4.41E-03              | 3.06E-02             |
| 451.8<br>452.9       | 4.02E-02<br>4.07E-02 | 4.42E-02<br>4.46E-02 | -6.20E-04<br>3.49E-04  | 3.28E-02<br>3.29E-02 | -1.33E-04<br>8.80E-04  | -4.35E-03<br>-3.67E-03 | 2.98E-02<br>3.02E-02 |
| 454.1                | 4.00E-02             | 4.48E-02             | 2.40E-04               | 3.23E-02             | 1.14E-03               | -3.35E-03              | 3.05E-02             |
| 455.2                | 4.06E-02             | 4.50E-02             | 3.04E-04               | 3.32E-02             | 1.46E-03               | -3.19E-03              | 3.00E-02             |
| 456.4                | 3.99E-02             | 4.46E-02             | 1.27E-04               | 3.37E-02             | 1.02E-03               | -3.06E-03              | 2.94E-02             |
| 457.5                | 4.01E-02             | 4.42E-02             | 6.59E-04               | 3.37E-02             | 5.66E-04               | -3.11E-03              | 2.85E-02             |
| 458.7                | 3.90E-02             | 4.39E-02             | 1.31E-03               | 3.26E-02             | 6.68E-04               | -3.00E-03              | 2.84E-02             |
| 459.8                | 3.91E-02             | 4.30E-02             | 1.73E-03               | 3.22E-02             | 1.12E-03               | -2.67E-03              | 2.86E-02             |
| 461                  | 3.75E-02             | 4.20E-02             | 1.43E-03               | 3.03E-02             | 1.49E-03               | -3.43E-03              | 2.77E-02             |

| 462.1 | 3.70E-02 | 4.12E-02             | 1.75E-03  | 2.97E-02 | 1.66E-03               | -2.96E-03 | 2.74E-02             |
|-------|----------|----------------------|-----------|----------|------------------------|-----------|----------------------|
| 463.3 | 3.62E-02 | 4.06E-02             | 2.34E-03  | 2.90E-02 | 9.57E-04               | -4.27E-03 | 2.81E-02             |
| 464.4 | 3.68E-02 | 4.02E-02             | 2.67E-03  | 2.95E-02 | 6.71E-05               | -4.03E-03 | 2.76E-02             |
| 465.6 | 3.67E-02 | 3.92E-02             | 1.32E-03  | 2.92E-02 | -1.19E-03              | -4.62E-03 | 2.74E-02             |
| 466.7 | 3.68E-02 | 4.00E-02             | 1.26E-03  | 2.88E-02 | -1.13E-03              | -4.07E-03 | 2.56E-02             |
|       |          |                      |           | 2.84E-02 |                        | -3.94E-03 |                      |
| 467.9 | 3.66E-02 | 4.01E-02             | 1.64E-03  |          | -9.92E-04              |           | 2.60E-02             |
| 469   | 3.60E-02 | 4.02E-02             | 2.44E-03  | 2.86E-02 | -4.23E-04              | -3.17E-03 | 2.56E-02             |
| 470.2 | 3.53E-02 | 3.94E-02             | 2.81E-03  | 2.85E-02 | -6.93E-06              | -2.70E-03 | 2.62E-02             |
| 471.3 | 3.48E-02 | 3.84E-02             | 2.95E-03  | 2.76E-02 | 2.64E-04               | -2.02E-03 | 2.59E-02             |
| 472.5 | 3.59E-02 | 3.76E-02             | 4.58E-03  | 2.75E-02 | 1.87E-04               | -1.79E-03 | 2.68E-02             |
| 473.6 | 3.59E-02 | 3.69E-02             | 5.27E-03  | 2.71E-02 | -2.43E-04              | -1.23E-03 | 2.66E-02             |
| 474.8 | 3.52E-02 | 3.64E-02             | 5.07E-03  | 2.71E-02 | -5.40E-05              | -1.15E-03 | 2.68E-02             |
| 475.9 | 3.35E-02 | 3.51E-02             | 4.38E-03  | 2.61E-02 | 7.46E-05               | -1.23E-03 | 2.65E-02             |
| 477.1 | 3.36E-02 | 3.45E-02             | 3.78E-03  | 2.55E-02 | 4.78E-05               | -1.90E-03 | 2.65E-02             |
| 478.2 | 3.38E-02 | 3.35E-02             | 3.59E-03  | 2.55E-02 | 3.99E-04               | -3.11E-03 | 2.57E-02             |
| 479.4 | 3.43E-02 | 3.31E-02             | 3.18E-03  | 2.50E-02 | 2.52E-04               | -3.39E-03 | 2.54E-02             |
| 480.5 | 3.39E-02 | 3.25E-02             | 3.57E-03  | 2.45E-02 | 1.12E-03               | -3.04E-03 | 2.55E-02             |
| 481.7 | 3.24E-02 | 3.20E-02             | 4.07E-03  | 2.33E-02 | 2.61E-04               | -2.41E-03 | 2.64E-02             |
| 482.8 | 3.17E-02 | 3.28E-02             | 4.59E-03  | 2.30E-02 | 4.60E-04               | -1.41E-03 | 2.61E-02             |
| 484   | 3.10E-02 | 3.25E-02             | 5.10E-03  | 2.29E-02 | 2.61E-04               | -7.89E-04 | 2.54E-02             |
| 485.1 | 3.06E-02 | 3.23E-02             | 4.60E-03  | 2.16E-02 | 8.07E-04               | -3.75E-04 | 2.41E-02             |
| 486.3 | 2.89E-02 | 3.04E-02             | 4.72E-03  | 2.08E-02 | 1.13E-03               | -7.23E-04 | 2.30E-02             |
| 487.4 | 2.77E-02 | 2.91E-02             | 4.01E-03  | 1.91E-02 | 1.35E-03               | -1.86E-03 | 2.30E-02             |
| 488.6 | 2.78E-02 | 2.86E-02             | 4.07E-03  | 1.94E-02 | 1.05E-03               | -2.27E-03 | 2.27E-02             |
| 489.7 | 2.75E-02 | 2.83E-02             | 3.85E-03  | 1.86E-02 | 1.23E-03               | -3.36E-03 | 2.28E-02             |
| 490.9 | 2.72E-02 | 2.76E-02             | 3.50E-03  | 1.78E-02 | -1.13E-04              | -3.68E-03 | 2.14E-02             |
| 492   | 2.63E-02 | 2.67E-02             | 4.01E-03  | 1.77E-02 | -4.76E-04              | -3.35E-03 | 2.15E-02             |
| 493.2 | 2.59E-02 | 2.68E-02             | 3.96E-03  | 1.77E-02 | -1.04E-03              | -2.88E-03 | 2.17E-02             |
| 494.3 | 2.48E-02 | 2.67E-02             | 4.15E-03  | 1.72E-02 | -9.92E-05              | -2.72E-03 | 2.21E-02             |
| 495.5 | 2.39E-02 | 2.68E-02             | 3.81E-03  | 1.52E-02 | 6.38E-04               | -3.17E-03 | 2.16E-02             |
| 496.6 | 2.29E-02 | 2.64E-02             | 3.70E-03  | 1.45E-02 | 8.43E-04               | -3.17E-03 | 2.10L-02<br>2.07E-02 |
|       |          |                      |           |          |                        |           |                      |
| 497.8 | 2.20E-02 | 2.54E-02             | 2.44E-03  | 1.39E-02 | -3.95E-04              | -3.01E-03 | 2.00E-02             |
| 498.9 | 2.12E-02 | 2.49E-02             | 2.16E-03  | 1.43E-02 | -5.25E-04              | -2.86E-03 | 2.02E-02             |
| 500.1 | 2.01E-02 | 2.39E-02             | 1.77E-03  | 1.31E-02 | -8.58E-04              | -2.96E-03 | 1.92E-02             |
| 501.2 | 1.90E-02 | 2.38E-02             | 2.04E-03  | 1.22E-02 | 5.66E-04               | -3.04E-03 | 1.90E-02             |
| 502.4 | 1.77E-02 | 2.30E-02             | 1.91E-03  | 1.12E-02 | -2.10E-04              | -3.51E-03 | 1.81E-02             |
| 503.5 | 1.66E-02 | 2.30E-02             | 1.76E-03  | 1.05E-02 | -4.99E-05              | -3.33E-03 | 1.89E-02             |
| 504.6 | 1.60E-02 | 2.15E-02             | 1.78E-03  | 1.02E-02 | -1.52E-03              | -4.28E-03 | 1.78E-02             |
| 505.8 | 1.47E-02 | 2.07E-02             | 1.95E-03  | 9.98E-03 | -1.23E-03              | -4.35E-03 | 1.74E-02             |
| 506.9 | 1.39E-02 | 2.02E-02             | 1.90E-03  | 1.01E-02 | -1.16E-03              | -4.66E-03 | 1.72E-02             |
| 508.1 | 1.33E-02 | 2.04E-02             | 2.67E-03  | 1.02E-02 | 3.93E-04               | -3.40E-03 | 1.78E-02             |
| 509.2 | 1.23E-02 | 2.02E-02             | 2.63E-03  | 9.45E-03 | 3.67E-04               | -3.04E-03 | 1.77E-02             |
| 510.4 | 1.13E-02 | 1.96E-02             | 2.81E-03  | 9.50E-03 | 9.62E-04               | -2.91E-03 | 1.70E-02             |
| 511.6 | 9.34E-03 | 1.92E-02             | 2.09E-03  | 8.87E-03 | -3.99E-04              | -3.37E-03 | 1.70E-02             |
| 512.6 | 8.48E-03 | 1.85E-02             | 2.39E-03  | 9.23E-03 | -2.91E-04              | -3.48E-03 | 1.62E-02             |
| 513.7 | 8.03E-03 | 1.86E-02             | 2.53E-03  | 8.27E-03 | -9.23E-04              | -3.60E-03 | 1.59E-02             |
| 514.7 | 7.57E-03 | 1.83E-02             | 2.84E-03  | 8.02E-03 | -8.30E-04              | -3.91E-03 | 1.49E-02             |
| 515.8 | 7.82E-03 | 1.84E-02             | 2.98E-03  | 7.76E-03 | -1.37E-04              | -3.98E-03 | 1.53E-02             |
| 516.9 | 6.94E-03 | 1.71E-02             | 2.96E-03  | 7.84E-03 | 1.75E-04               | -4.19E-03 | 1.52E-02             |
| 517.9 | 7.24E-03 | 1.65E-02             | 2.13E-03  | 7.57E-03 | 7.59E-04               | -4.37E-03 | 1.54E-02             |
| 519   | 6.41E-03 | 1.57E-02             | 1.44E-03  | 6.43E-03 | 1.55E-04               | -4.70E-03 | 1.52E-02             |
| 520.1 | 6.44E-03 | 1.60E-02             | 5.89E-04  | 6.21E-03 | -2.28E-05              | -4.69E-03 | 1.54E-02             |
| 521.1 | 6.24E-03 | 1.70E-02             | 7.86E-04  | 5.85E-03 | 5.63E-05               | -4.49E-03 | 1.52E-02             |
| 522.2 | 5.44E-03 | 1.68E-02             | 5.92E-04  | 5.65E-03 | -4.69E-05              | -4.61E-03 | 1.47E-02             |
| 523.3 | 5.36E-03 | 1.72E-02             | 8.90E-04  | 5.26E-03 | 4.55E-04               | -4.84E-03 | 1.42E-02             |
| 524.3 | 5.01E-03 | 1.63E-02             | 3.04E-04  | 4.88E-03 | 4.99E-04               | -4.96E-03 | 1.41E-02             |
| 525.4 | 5.13E-03 | 1.63E-02             | -3.20E-04 | 4.52E-03 | 8.42E-04               | -4.85E-03 | 1.38E-02             |
| 526.5 | 5.06E-03 | 1.52E-02             | -1.23E-03 | 3.48E-03 | -3.05E-05              | -4.99E-03 | 1.37E-02             |
| 527.5 | 5.73E-03 | 1.47E-02             | -1.01E-03 | 3.47E-03 | 2.18E-04               | -4.35E-03 | 1.32E-02             |
| 528.6 | 6.71E-03 | 1.48E-02             | -1.05E-03 | 2.98E-03 | -3.87E-05              | -4.20E-03 | 1.31E-02             |
| 529.7 | 6.75E-03 | 1.56E-02             | -1.85E-03 | 2.88E-03 | 4.30E-04               | -3.92E-03 | 1.31E-02<br>1.27E-02 |
| 530.7 | 6.99E-03 | 1.61E-02             | -2.98E-03 | 1.98E-03 | -7.18E-04              |           | 1.27E-02<br>1.22E-02 |
| 530.7 | 6.48E-03 | 1.51E-02<br>1.59E-02 | -3.66E-03 | 1.92E-03 | -7.18E-04<br>-7.56E-04 | -4.61E-03 | 1.22E-02<br>1.23E-02 |
|       |          |                      |           |          |                        | -4.31E-03 |                      |
| 532.9 | 6.74E-03 | 1.57E-02             | -3.55E-03 | 2.10E-03 | -4.33E-04              | -4.18E-03 | 1.22E-02             |
| 533.9 | 6.08E-03 | 1.59E-02             | -3.75E-03 | 1.86E-03 | 9.00E-05               | -3.71E-03 | 1.22E-02             |
| 535   | 6.39E-03 | 1.64E-02             | -4.31E-03 | 1.81E-03 | 5.15E-05               | -4.09E-03 | 1.14E-02             |
| 536.1 | 6.90E-03 | 1.63E-02             | -4.93E-03 | 8.93E-04 | -6.98E-04              | -4.73E-03 | 1.10E-02             |
| 537.1 | 7.78E-03 | 1.63E-02             | -5.08E-03 | 1.23E-03 | -4.57E-04              | -4.50E-03 | 1.12E-02             |
| 538.2 | 8.51E-03 | 1.65E-02             | -5.16E-03 | 5.66E-04 | -3.17E-04              | -4.67E-03 | 1.15E-02             |
| 539.2 | 9.01E-03 | 1.77E-02             | -5.15E-03 | 7.15E-04 | -1.84E-04              | -4.40E-03 | 1.19E-02             |
| 540.3 | 9.16E-03 | 1.76E-02             | -4.94E-03 | 2.98E-04 | -2.68E-04              | -4.58E-03 | 1.19E-02             |
| 541.4 | 9.69E-03 | 1.75E-02             | -5.44E-03 | 3.47E-04 | -3.00E-05              | -3.61E-03 | 1.21E-02             |
|       |          |                      |           |          |                        |           |                      |

| 542.4 | 9.80E-03 | 1.72E-02 | -5.88E-03 | -8.57E-05 | 3.56E-04  | -2.87E-03 | 1.22E-02 |
|-------|----------|----------|-----------|-----------|-----------|-----------|----------|
| 543.5 | 9.89E-03 | 1.71E-02 | -6.33E-03 | -3.24E-04 | 2.26E-04  | -2.97E-03 | 1.19E-02 |
| 544.6 | 9.96E-03 | 1.72E-02 | -6.58E-03 | -3.64E-04 | 1.35E-04  | -3.56E-03 | 1.18E-02 |
| 545.6 | 1.03E-02 | 1.62E-02 | -6.39E-03 | -3.00E-04 | -9.85E-05 | -3.81E-03 | 1.15E-02 |
| 546.7 | 1.07E-02 | 1.62E-02 | -7.53E-03 | -2.34E-04 | 2.51E-04  | -4.32E-03 | 1.13E-02 |
|       |          |          |           |           |           |           |          |
| 547.8 | 1.07E-02 | 1.61E-02 | -7.78E-03 | -2.82E-04 | 1.09E-04  | -3.81E-03 | 1.12E-02 |
| 548.8 | 1.13E-02 | 1.72E-02 | -8.27E-03 | -3.17E-04 | 1.78E-04  | -4.16E-03 | 1.09E-02 |
| 549.9 | 1.12E-02 | 1.75E-02 | -8.66E-03 | -3.03E-04 | 3.87E-05  | -4.67E-03 | 1.06E-02 |
| 551   | 1.12E-02 | 1.76E-02 | -8.91E-03 | -9.30E-04 | 6.69E-05  | -5.01E-03 | 1.02E-02 |
| 552   | 1.04E-02 | 1.70E-02 | -9.92E-03 | -1.13E-03 | 2.51E-04  | -5.02E-03 | 1.03E-02 |
| 553.1 | 1.09E-02 | 1.72E-02 | -1.01E-02 | -1.91E-03 | 1.79E-04  | -3.92E-03 | 9.87E-03 |
| 554.2 | 1.16E-02 | 1.73E-02 | -1.11E-02 | -1.89E-03 | 1.08E-04  | -4.34E-03 | 9.63E-03 |
|       |          |          |           |           |           |           |          |
| 555.2 | 1.21E-02 | 1.77E-02 | -1.13E-02 | -2.15E-03 | -4.14E-04 | -4.07E-03 | 9.18E-03 |
| 556.3 | 1.24E-02 | 1.78E-02 | -1.17E-02 | -1.55E-03 | -4.69E-04 | -3.94E-03 | 1.00E-02 |
| 557.4 | 1.24E-02 | 1.82E-02 | -1.14E-02 | -1.09E-03 | -4.98E-04 | -3.80E-03 | 1.07E-02 |
| 558.4 | 1.28E-02 | 1.83E-02 | -1.11E-02 | -7.33E-04 | -3.94E-04 | -3.31E-03 | 1.07E-02 |
| 559.5 | 1.28E-02 | 1.80E-02 | -1.10E-02 | -6.93E-04 | -2.89E-04 | -4.29E-03 | 1.05E-02 |
| 560.6 | 1.34E-02 | 1.80E-02 | -1.14E-02 | -7.23E-04 | -2.57E-04 | -4.10E-03 | 9.90E-03 |
| 561.6 | 1.33E-02 | 1.84E-02 | -1.17E-02 | -7.38E-04 | -3.65E-04 | -4.48E-03 | 1.05E-02 |
|       |          |          |           |           |           |           |          |
| 562.7 | 1.33E-02 | 1.84E-02 | -1.16E-02 | -1.32E-03 | 5.55E-06  | -4.25E-03 | 1.01E-02 |
| 563.7 | 1.30E-02 | 1.83E-02 | -1.18E-02 | -2.20E-03 | -1.71E-04 | -4.41E-03 | 1.01E-02 |
| 564.8 | 1.31E-02 | 1.78E-02 | -1.19E-02 | -2.80E-03 | -1.08E-04 | -5.36E-03 | 8.97E-03 |
| 565.9 | 1.33E-02 | 1.79E-02 | -1.23E-02 | -2.86E-03 | -5.17E-04 | -5.10E-03 | 9.11E-03 |
| 566.9 | 1.37E-02 | 1.74E-02 | -1.20E-02 | -2.40E-03 | -4.34E-04 | -5.22E-03 | 8.98E-03 |
| 568   | 1.36E-02 | 1.77E-02 | -1.21E-02 | -2.41E-03 | -4.15E-04 | -4.74E-03 | 9.47E-03 |
| 569.1 | 1.37E-02 | 1.77E-02 | -1.23E-02 | -2.71E-03 | 1.98E-05  | -4.72E-03 | 9.20E-03 |
|       |          |          |           |           |           |           |          |
| 570.1 | 1.40E-02 | 1.77E-02 | -1.26E-02 | -2.79E-03 | 6.67E-04  | -4.73E-03 | 8.65E-03 |
| 571.2 | 1.43E-02 | 1.76E-02 | -1.30E-02 | -2.74E-03 | 1.03E-03  | -4.50E-03 | 8.89E-03 |
| 572.3 | 1.40E-02 | 1.73E-02 | -1.36E-02 | -2.84E-03 | 6.47E-04  | -4.85E-03 | 8.15E-03 |
| 573.3 | 1.35E-02 | 1.76E-02 | -1.34E-02 | -2.71E-03 | 4.32E-04  | -4.75E-03 | 8.61E-03 |
| 574.4 | 1.34E-02 | 1.72E-02 | -1.34E-02 | -2.86E-03 | 6.60E-05  | -5.25E-03 | 7.84E-03 |
| 575.5 | 1.36E-02 | 1.76E-02 | -1.33E-02 | -2.66E-03 | -5.34E-06 | -5.26E-03 | 8.17E-03 |
| 576.5 | 1.40E-02 | 1.79E-02 | -1.35E-02 | -3.14E-03 | -2.00E-04 | -5.64E-03 | 8.11E-03 |
|       |          |          |           |           |           |           |          |
| 577.6 | 1.45E-02 | 1.87E-02 | -1.36E-02 | -2.77E-03 | -2.68E-05 | -5.59E-03 | 8.35E-03 |
| 578.7 | 1.49E-02 | 1.87E-02 | -1.30E-02 | -2.53E-03 | 2.00E-04  | -5.08E-03 | 8.34E-03 |
| 579.7 | 1.46E-02 | 1.82E-02 | -1.33E-02 | -3.01E-03 | 2.85E-04  | -5.10E-03 | 7.75E-03 |
| 580.8 | 1.43E-02 | 1.76E-02 | -1.35E-02 | -3.62E-03 | 7.14E-04  | -4.89E-03 | 7.28E-03 |
| 581.9 | 1.35E-02 | 1.71E-02 | -1.42E-02 | -4.16E-03 | -1.47E-04 | -6.07E-03 | 6.76E-03 |
| 582.9 | 1.31E-02 | 1.70E-02 | -1.45E-02 | -3.48E-03 | -4.00E-04 | -5.92E-03 | 6.85E-03 |
| 584   | 1.27E-02 | 1.71E-02 | -1.45E-02 | -3.32E-03 | -5.89E-04 | -6.08E-03 | 6.91E-03 |
| 585.1 | 1.30E-02 | 1.76E-02 | -1.38E-02 | -3.04E-03 | 6.61E-04  | -5.15E-03 | 7.37E-03 |
|       |          |          |           |           |           |           |          |
| 586.1 | 1.32E-02 | 1.77E-02 | -1.32E-02 | -2.90E-03 | 7.21E-04  | -5.37E-03 | 7.62E-03 |
| 587.2 | 1.34E-02 | 1.80E-02 | -1.26E-02 | -2.84E-03 | 8.75E-04  | -4.96E-03 | 7.65E-03 |
| 588.3 | 1.39E-02 | 1.76E-02 | -1.27E-02 | -2.90E-03 | 7.93E-04  | -5.38E-03 | 7.17E-03 |
| 589.3 | 1.44E-02 | 1.73E-02 | -1.31E-02 | -2.88E-03 | 6.33E-04  | -5.45E-03 | 6.65E-03 |
| 590.4 | 1.46E-02 | 1.67E-02 | -1.37E-02 | -2.85E-03 | 7.94E-05  | -5.80E-03 | 6.36E-03 |
| 591.5 | 1.48E-02 | 1.67E-02 | -1.38E-02 | -2.92E-03 | -2.57E-04 | -5.60E-03 | 6.72E-03 |
| 592.6 | 1.41E-02 | 1.66E-02 | -1.37E-02 | -3.45E-03 | -3.00E-04 | -5.87E-03 | 6.50E-03 |
|       |          |          |           |           |           |           |          |
| 593.6 | 1.38E-02 | 1.67E-02 | -1.34E-02 | -3.62E-03 | 2.93E-04  | -5.98E-03 | 6.46E-03 |
| 594.7 | 1.33E-02 | 1.70E-02 | -1.41E-02 | -3.63E-03 | 2.03E-05  | -6.08E-03 | 6.16E-03 |
| 595.8 | 1.36E-02 | 1.69E-02 | -1.45E-02 | -3.86E-03 | -1.84E-04 | -5.87E-03 | 6.59E-03 |
| 596.9 | 1.42E-02 | 1.68E-02 | -1.44E-02 | -3.66E-03 | -6.91E-04 | -5.96E-03 | 7.03E-03 |
| 598   | 1.41E-02 | 1.58E-02 | -1.46E-02 | -4.02E-03 | -3.43E-04 | -5.80E-03 | 6.98E-03 |
| 599   | 1.40E-02 | 1.57E-02 | -1.46E-02 | -4.00E-03 | 1.10E-04  | -5.78E-03 | 6.77E-03 |
| 600.1 | 1.37E-02 | 1.53E-02 | -1.49E-02 | -4.27E-03 | 2.93E-04  | -5.81E-03 | 6.29E-03 |
|       |          | 1.56E-02 |           | -4.70E-03 | -7.80E-05 |           | 6.10E-03 |
| 601.2 | 1.37E-02 |          | -1.47E-02 |           |           | -6.19E-03 |          |
| 602.3 | 1.33E-02 | 1.55E-02 | -1.49E-02 | -5.08E-03 | -7.88E-04 | -6.40E-03 | 5.48E-03 |
| 603.3 | 1.34E-02 | 1.55E-02 | -1.50E-02 | -5.50E-03 | -7.07E-04 | -6.80E-03 | 5.05E-03 |
| 604.4 | 1.34E-02 | 1.55E-02 | -1.52E-02 | -5.20E-03 | -5.90E-04 | -7.01E-03 | 4.62E-03 |
| 605.5 | 1.34E-02 | 1.53E-02 | -1.52E-02 | -5.20E-03 | -4.84E-04 | -7.42E-03 | 4.05E-03 |
| 606.6 | 1.27E-02 | 1.48E-02 | -1.58E-02 | -5.39E-03 | -7.30E-04 | -7.49E-03 | 3.42E-03 |
| 607.6 | 1.26E-02 | 1.43E-02 | -1.59E-02 | -5.99E-03 | -9.42E-04 | -7.41E-03 | 3.45E-03 |
| 608.7 | 1.29E-02 | 1.41E-02 | -1.59E-02 | -5.94E-03 | -2.02E-04 | -7.19E-03 | 3.78E-03 |
|       |          |          |           |           |           |           |          |
| 609.8 | 1.27E-02 | 1.43E-02 | -1.60E-02 | -5.72E-03 | -9.58E-05 | -7.29E-03 | 3.57E-03 |
| 610.9 | 1.26E-02 | 1.44E-02 | -1.62E-02 | -5.17E-03 | -7.43E-05 | -7.64E-03 | 3.36E-03 |
| 611.9 | 1.24E-02 | 1.45E-02 | -1.58E-02 | -5.17E-03 | -3.71E-04 | -7.73E-03 | 3.34E-03 |
| 613   | 1.28E-02 | 1.45E-02 | -1.56E-02 | -4.98E-03 | -4.40E-04 | -7.32E-03 | 3.90E-03 |
| 614.1 | 1.30E-02 | 1.46E-02 | -1.53E-02 | -5.01E-03 | -3.17E-04 | -6.84E-03 | 3.54E-03 |
| 615.2 | 1.34E-02 | 1.45E-02 | -1.56E-02 | -4.92E-03 | -2.94E-04 | -6.68E-03 | 3.62E-03 |
| 616.2 | 1.36E-02 | 1.47E-02 | -1.58E-02 | -5.35E-03 | -4.80E-04 | -6.72E-03 | 3.57E-03 |
| 617.3 | 1.38E-02 | 1.49E-02 | -1.62E-02 | -5.32E-03 | -3.31E-04 | -7.11E-03 | 3.79E-03 |
|       |          |          |           |           |           |           |          |
| 618.4 | 1.39E-02 | 1.52E-02 | -1.68E-02 | -5.15E-03 | -6.53E-04 | -7.08E-03 | 3.87E-03 |
|       |          |          |           |           |           |           |          |

| 619.5 | 1.42E-02 | 1.52E-02 | -1.69E-02 | -4.45E-03 | -9.23E-05 | -7.12E-03 | 4.06E-03  |
|-------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| 620.6 | 1.43E-02 | 1.52E-02 | -1.75E-02 | -4.36E-03 | -5.35E-05 | -7.12E-03 | 4.32E-03  |
|       |          | 1.54E-02 |           |           | 3.69E-04  |           |           |
| 621.6 | 1.44E-02 |          | -1.72E-02 | -4.27E-03 |           | -6.81E-03 | 4.09E-03  |
| 622.7 | 1.41E-02 | 1.49E-02 | -1.75E-02 | -4.91E-03 | -2.14E-04 | -6.93E-03 | 3.57E-03  |
| 623.8 | 1.44E-02 | 1.47E-02 | -1.73E-02 | -5.27E-03 | -4.53E-04 | -6.67E-03 | 3.00E-03  |
| 624.9 | 1.42E-02 | 1.40E-02 | -1.79E-02 | -5.50E-03 | -4.44E-04 | -7.39E-03 | 2.96E-03  |
| 625.9 | 1.46E-02 | 1.42E-02 | -1.80E-02 | -5.51E-03 | 1.17E-05  | -7.26E-03 | 2.69E-03  |
| 627   | 1.45E-02 | 1.45E-02 | -1.80E-02 | -5.48E-03 | -8.35E-05 | -7.10E-03 | 2.64E-03  |
| 628.1 | 1.44E-02 | 1.46E-02 | -1.78E-02 | -5.58E-03 | -3.18E-04 | -7.16E-03 | 2.26E-03  |
| 629.2 | 1.41E-02 | 1.42E-02 | -1.77E-02 | -5.68E-03 | -1.26E-04 | -7.24E-03 | 2.80E-03  |
| 630.2 | 1.45E-02 | 1.34E-02 | -1.76E-02 | -5.72E-03 | 0.00E+00  | -7.15E-03 | 2.77E-03  |
| 631.3 | 1.48E-02 | 1.30E-02 | -1.76E-02 | -5.90E-03 | -7.64E-05 | -6.47E-03 | 2.73E-03  |
| 632.4 | 1.53E-02 | 1.32E-02 | -1.76E-02 | -5.58E-03 | -3.25E-04 | -6.34E-03 | 2.49E-03  |
| 633.5 | 1.53E-02 | 1.36E-02 | -1.73E-02 | -5.43E-03 | -3.53E-05 | -6.22E-03 | 2.31E-03  |
|       |          |          |           |           |           |           |           |
| 634.5 | 1.60E-02 | 1.33E-02 | -1.70E-02 | -5.23E-03 | 6.56E-05  | -6.53E-03 | 2.40E-03  |
| 635.6 | 1.56E-02 | 1.30E-02 | -1.72E-02 | -5.35E-03 | -3.04E-05 | -6.79E-03 | 2.31E-03  |
| 636.7 | 1.51E-02 | 1.24E-02 | -1.80E-02 | -5.91E-03 | -3.43E-04 | -7.53E-03 | 2.42E-03  |
| 637.8 | 1.49E-02 | 1.22E-02 | -1.86E-02 | -6.14E-03 | -5.61E-04 | -7.53E-03 | 2.32E-03  |
| 638.8 | 1.48E-02 | 1.17E-02 | -1.85E-02 | -6.34E-03 | -5.69E-04 | -7.54E-03 | 1.56E-03  |
| 639.9 | 1.53E-02 | 1.14E-02 | -1.84E-02 | -6.17E-03 | -7.36E-04 | -7.46E-03 | 1.49E-03  |
| 641   | 1.48E-02 | 1.11E-02 | -1.83E-02 | -6.38E-03 | -2.73E-04 | -7.42E-03 | 1.23E-03  |
| 642.1 | 1.55E-02 | 1.11E-02 | -1.83E-02 | -5.97E-03 | -2.58E-04 | -7.44E-03 | 2.11E-03  |
| 643.1 | 1.54E-02 | 1.15E-02 | -1.86E-02 | -5.42E-03 | -3.06E-04 | -7.11E-03 | 2.06E-03  |
| 644.2 | 1.54E-02 | 1.17E-02 | -1.89E-02 | -5.11E-03 | -5.07E-04 | -7.56E-03 | 2.02E-03  |
|       |          |          |           |           |           |           |           |
| 645.3 | 1.47E-02 | 1.15E-02 | -1.94E-02 | -5.27E-03 | -4.19E-04 | -7.81E-03 | 1.41E-03  |
| 646.4 | 1.45E-02 | 1.06E-02 | -1.95E-02 | -5.51E-03 | -2.86E-05 | -8.05E-03 | 1.05E-03  |
| 647.5 | 1.49E-02 | 1.07E-02 | -1.98E-02 | -5.59E-03 | 9.32E-05  | -7.83E-03 | 8.53E-04  |
| 648.5 | 1.51E-02 | 1.10E-02 | -2.00E-02 | -5.81E-03 | -1.29E-04 | -7.78E-03 | 6.27E-04  |
| 649.6 | 1.52E-02 | 1.17E-02 | -1.98E-02 | -5.26E-03 | 5.35E-05  | -7.57E-03 | 8.78E-04  |
| 650.7 | 1.52E-02 | 1.13E-02 | -1.98E-02 | -4.84E-03 | -1.88E-04 | -7.58E-03 | 1.02E-03  |
| 651.8 | 1.49E-02 | 1.10E-02 | -1.97E-02 | -4.22E-03 | -2.30E-04 | -7.43E-03 | 9.10E-04  |
| 652.8 | 1.49E-02 | 1.09E-02 | -1.96E-02 | -5.06E-03 | -4.32E-04 | -7.47E-03 | 9.11E-04  |
| 653.9 | 1.47E-02 | 1.13E-02 | -1.93E-02 | -5.14E-03 | -3.04E-04 | -7.62E-03 | 1.12E-03  |
| 655   | 1.52E-02 | 1.15E-02 | -1.87E-02 | -5.22E-03 | -2.06E-04 | -7.46E-03 | 1.54E-03  |
| 656.1 | 1.48E-02 | 1.07E-02 | -1.93E-02 | -4.97E-03 | -5.91E-04 | -7.79E-03 | 1.09E-03  |
| 657.1 | 1.46E-02 | 1.07E-02 | -1.90E-02 | -4.99E-03 | -4.96E-04 | -7.68E-03 | 6.42E-04  |
| 658.2 | 1.45E-02 | 1.06E-02 | -1.93E-02 | -5.45E-03 | -3.05E-04 | -7.85E-03 | 4.39E-04  |
| 659.3 | 1.49E-02 | 1.11E-02 | -1.88E-02 | -5.31E-03 | -1.80E-04 | -7.52E-03 | 8.31E-04  |
| 660.4 | 1.50E-02 | 1.14E-02 | -1.86E-02 | -4.78E-03 | 2.96E-04  | -7.15E-03 | 1.38E-03  |
|       |          |          |           | -4.50E-03 |           |           |           |
| 661.4 | 1.48E-02 | 1.15E-02 | -1.88E-02 |           | 9.80E-05  | -7.21E-03 | 1.51E-03  |
| 662.5 | 1.43E-02 | 1.14E-02 | -1.91E-02 | -4.12E-03 | 5.09E-04  | -7.47E-03 | 1.60E-03  |
| 663.6 | 1.39E-02 | 1.05E-02 | -1.94E-02 | -4.55E-03 | -5.62E-05 | -8.08E-03 | 1.01E-03  |
| 664.7 | 1.42E-02 | 1.07E-02 | -1.91E-02 | -4.07E-03 | 3.42E-04  | -8.04E-03 | 8.02E-04  |
| 665.7 | 1.49E-02 | 1.10E-02 | -1.87E-02 | -3.84E-03 | 1.46E-04  | -7.99E-03 | 4.59E-04  |
| 666.8 | 1.53E-02 | 1.15E-02 | -1.89E-02 | -3.40E-03 | 5.30E-05  | -7.85E-03 | 6.21E-04  |
| 667.9 | 1.52E-02 | 1.13E-02 | -1.93E-02 | -3.60E-03 | -3.48E-04 | -8.13E-03 | 6.27E-04  |
| 669   | 1.48E-02 | 1.06E-02 | -1.98E-02 | -3.68E-03 | -5.23E-04 | -8.46E-03 | 9.27E-04  |
| 670.1 | 1.46E-02 | 1.02E-02 | -1.99E-02 | -4.24E-03 | -4.30E-04 | -9.05E-03 | 7.95E-04  |
| 671.1 | 1.49E-02 | 9.30E-03 | -2.02E-02 | -4.30E-03 | -1.61E-04 | -9.05E-03 | 3.13E-04  |
| 672.2 | 1.50E-02 | 8.83E-03 | -2.04E-02 | -4.52E-03 | -1.85E-04 | -9.66E-03 | -2.63E-04 |
| 673.3 | 1.48E-02 | 8.63E-03 | -2.02E-02 | -4.28E-03 | 3.15E-04  | -9.61E-03 | -4.03E-04 |
| 674.3 | 1.41E-02 | 8.75E-03 | -2.01E-02 | -4.35E-03 | -4.58E-05 | -1.01E-02 | -4.28E-04 |
| 675.4 | 1.40E-02 | 9.19E-03 | -2.01E-02 | -4.46E-03 | 1.10E-04  | -9.77E-03 | -1.86E-04 |
|       |          |          |           |           |           |           |           |
| 676.5 | 1.39E-02 | 8.97E-03 | -2.05E-02 | -4.42E-03 | -3.47E-04 | -1.00E-02 | -4.95E-04 |
| 677.6 | 1.42E-02 | 9.38E-03 | -2.05E-02 | -4.03E-03 | -3.59E-05 | -9.81E-03 | -2.52E-05 |
| 678.6 | 1.36E-02 | 8.53E-03 | -2.05E-02 | -4.35E-03 | -6.53E-05 | -9.64E-03 | -2.36E-04 |
| 679.7 | 1.38E-02 | 8.09E-03 | -2.09E-02 | -4.60E-03 | -1.73E-04 | -9.46E-03 | -2.56E-04 |
| 680.8 | 1.37E-02 | 7.79E-03 | -2.08E-02 | -5.15E-03 | -3.12E-04 | -9.40E-03 | -3.97E-04 |
| 681.9 | 1.41E-02 | 8.07E-03 | -2.05E-02 | -5.22E-03 | -3.38E-04 | -9.16E-03 | -3.46E-04 |
| 682.9 | 1.37E-02 | 8.50E-03 | -2.02E-02 | -5.24E-03 | -4.45E-04 | -9.25E-03 | -2.67E-04 |
| 684   | 1.35E-02 | 8.73E-03 | -1.97E-02 | -4.96E-03 | -8.66E-04 | -9.44E-03 | -9.90E-05 |
| 685.1 | 1.34E-02 | 9.43E-03 | -1.93E-02 | -4.64E-03 | -7.47E-04 | -9.28E-03 | 1.46E-04  |
| 686.2 | 1.36E-02 | 9.20E-03 | -1.90E-02 | -4.66E-03 | -6.78E-04 | -9.20E-03 | -1.27E-04 |
| 687.2 | 1.35E-02 | 8.82E-03 | -1.89E-02 | -4.53E-03 | -4.58E-04 | -8.82E-03 | -2.63E-04 |
| 688.3 |          |          |           |           |           |           |           |
|       | 1.31E-02 | 8.25E-03 | -1.91E-02 | -4.49E-03 | -8.48E-04 | -9.43E-03 | -5.35E-04 |
| 689.4 | 1.33E-02 | 8.33E-03 | -1.89E-02 | -4.14E-03 | -6.07E-04 | -9.99E-03 | 2.33E-04  |
| 690.4 | 1.37E-02 | 8.54E-03 | -1.80E-02 | -3.96E-03 | -1.20E-04 | -9.78E-03 | 1.04E-04  |
| 691.5 | 1.41E-02 | 8.91E-03 | -1.79E-02 | -3.72E-03 | 2.60E-04  | -9.97E-03 | -3.11E-04 |
| 692.6 | 1.46E-02 | 9.23E-03 | -1.74E-02 | -3.72E-03 | 8.23E-05  | -9.50E-03 | -5.81E-04 |
| 693.7 | 1.46E-02 | 9.58E-03 | -1.78E-02 | -3.79E-03 | 2.47E-04  | -9.82E-03 | -3.22E-04 |
| 694.7 | 1.47E-02 | 8.99E-03 | -1.75E-02 | -4.13E-03 | -5.31E-06 | -1.01E-02 | -8.75E-05 |
| 695.8 | 1.43E-02 | 8.76E-03 | -1.72E-02 | -4.64E-03 | -3.43E-05 | -1.01E-02 | -2.35E-04 |
|       |          |          |           |           |           |           |           |

| 696.9 | 1.39E-02 | 8.32E-03 | -1.71E-02 | -5.00E-03 | -3.56E-04 | -1.02E-02 | -5.06E-04 |
|-------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| 698   | 1.34E-02 | 8.83E-03 | -1.65E-02 | -4.65E-03 | -6.51E-06 | -9.62E-03 | -1.06E-04 |
| 699   | 1.31E-02 | 8.74E-03 | -1.67E-02 | -4.40E-03 | -3.90E-05 | -1.01E-02 | 2.97E-04  |
| 700.1 | 1.30E-02 | 8.64E-03 | -1.70E-02 | -4.53E-03 | 8.40E-05  | -1.06E-02 | 2.20E-05  |
| 701.2 | 1.36E-02 | 8.44E-03 | -1.66E-02 | -4.33E-03 | -2.40E-04 | -1.05E-02 | 8.67E-05  |
| 702.2 | 1.38E-02 | 9.06E-03 | -1.65E-02 | -4.26E-03 | -1.19E-04 | -1.01E-02 | -2.29E-04 |
|       |          |          |           |           |           |           |           |
| 703.3 | 1.39E-02 | 9.32E-03 | -1.62E-02 | -3.96E-03 | -1.57E-04 | -9.81E-03 | 6.41E-04  |
| 704.4 | 1.29E-02 | 9.25E-03 | -1.66E-02 | -4.66E-03 | 7.31E-05  | -1.02E-02 | 2.52E-04  |
| 705.5 | 1.29E-02 | 8.99E-03 | -1.68E-02 | -4.77E-03 | 2.19E-04  | -1.06E-02 | 4.16E-04  |
| 706.6 | 1.27E-02 | 8.50E-03 | -1.62E-02 | -4.92E-03 | 1.29E-04  | -1.05E-02 | -1.38E-05 |
| 707.7 | 1.31E-02 | 8.74E-03 | -1.68E-02 | -4.75E-03 | 2.19E-04  | -1.07E-02 | 1.93E-04  |
| 708.8 | 1.30E-02 | 8.59E-03 | -1.64E-02 | -4.49E-03 | 2.14E-04  | -1.01E-02 | 6.79E-04  |
|       |          |          |           |           |           |           |           |
| 709.9 | 1.27E-02 | 8.91E-03 | -1.70E-02 | -4.60E-03 | -1.86E-04 | -1.06E-02 | 2.45E-04  |
| 711   | 1.25E-02 | 8.67E-03 | -1.73E-02 | -4.68E-03 | -3.34E-04 | -1.09E-02 | -1.68E-04 |
| 712.1 | 1.23E-02 | 8.74E-03 | -1.75E-02 | -5.08E-03 | -6.38E-04 | -1.12E-02 | -7.72E-04 |
| 713.2 | 1.24E-02 | 8.32E-03 | -1.81E-02 | -5.11E-03 | -5.14E-04 | -1.12E-02 | -7.16E-04 |
| 714.3 | 1.27E-02 | 8.48E-03 | -1.76E-02 | -5.03E-03 | -5.57E-04 | -1.08E-02 | -2.33E-04 |
| 715.4 | 1.26E-02 | 7.93E-03 | -1.73E-02 | -5.22E-03 | -3.52E-04 | -1.10E-02 | -2.54E-04 |
|       |          |          |           |           |           |           |           |
| 716.5 | 1.29E-02 | 8.13E-03 | -1.70E-02 | -5.17E-03 | -6.79E-05 | -1.09E-02 | -1.05E-04 |
| 717.6 | 1.34E-02 | 7.74E-03 | -1.66E-02 | -5.37E-03 | -3.96E-04 | -1.05E-02 | -3.32E-04 |
| 718.8 | 1.38E-02 | 7.68E-03 | -1.67E-02 | -5.69E-03 | -4.23E-04 | -1.06E-02 | -6.39E-04 |
| 719.9 | 1.38E-02 | 7.84E-03 | -1.63E-02 | -5.79E-03 | -6.41E-04 | -1.03E-02 | -4.81E-04 |
| 721   | 1.30E-02 | 8.03E-03 | -1.69E-02 | -5.79E-03 | -1.64E-04 | -1.12E-02 | -7.79E-04 |
| 722.1 | 1.29E-02 | 7.85E-03 | -1.67E-02 | -5.15E-03 | -4.75E-04 | -1.09E-02 | -2.12E-04 |
| 723.2 | 1.27E-02 | 7.43E-03 | -1.65E-02 | -5.27E-03 | -4.88E-04 | -1.11E-02 | -2.51E-04 |
|       |          |          |           |           |           |           |           |
| 724.3 | 1.26E-02 | 7.30E-03 | -1.64E-02 | -5.28E-03 | -5.76E-04 | -1.06E-02 | -8.51E-05 |
| 725.4 | 1.28E-02 | 7.79E-03 | -1.63E-02 | -5.42E-03 | -1.91E-04 | -1.05E-02 | -1.01E-04 |
| 726.5 | 1.28E-02 | 7.78E-03 | -1.70E-02 | -5.45E-03 | -4.97E-04 | -1.11E-02 | -6.99E-04 |
| 727.6 | 1.39E-02 | 8.07E-03 | -1.61E-02 | -5.39E-03 | -6.27E-04 | -1.10E-02 | -2.89E-04 |
| 728.7 | 1.38E-02 | 8.01E-03 | -1.63E-02 | -5.93E-03 | -1.01E-03 | -1.17E-02 | -4.33E-04 |
| 729.8 | 1.42E-02 | 7.84E-03 | -1.55E-02 | -5.68E-03 | -5.25E-04 | -1.12E-02 | 4.29E-04  |
|       |          |          |           |           |           |           |           |
| 731   | 1.35E-02 | 7.40E-03 | -1.62E-02 | -6.15E-03 | -3.99E-04 | -1.15E-02 | 2.48E-04  |
| 732.1 | 1.38E-02 | 7.31E-03 | -1.59E-02 | -5.65E-03 | -7.39E-05 | -1.11E-02 | 2.50E-04  |
| 733.2 | 1.37E-02 | 7.64E-03 | -1.57E-02 | -6.22E-03 | -1.06E-04 | -1.11E-02 | -6.93E-05 |
| 734.3 | 1.42E-02 | 7.96E-03 | -1.58E-02 | -5.78E-03 | 2.61E-05  | -1.10E-02 | -1.56E-05 |
| 735.4 | 1.42E-02 | 8.53E-03 | -1.61E-02 | -5.59E-03 | 4.28E-04  | -1.07E-02 | 8.51E-05  |
| 736.5 | 1.44E-02 | 8.07E-03 | -1.66E-02 | -5.43E-03 | 8.88E-04  | -1.09E-02 | 5.65E-05  |
| 737.6 | 1.40E-02 | 7.51E-03 | -1.60E-02 | -5.74E-03 | 9.06E-04  | -1.08E-02 | 2.12E-05  |
|       | 1.40E-02 |          |           |           |           |           |           |
| 738.7 |          | 6.91E-03 | -1.58E-02 | -6.18E-03 | 4.55E-04  | -1.12E-02 | 1.88E-05  |
| 739.8 | 1.40E-02 | 7.08E-03 | -1.52E-02 | -6.33E-03 | -2.02E-04 | -1.13E-02 | 1.22E-05  |
| 740.9 | 1.43E-02 | 7.56E-03 | -1.57E-02 | -6.12E-03 | -2.54E-04 | -1.15E-02 | 4.38E-05  |
| 742.1 | 1.48E-02 | 7.57E-03 | -1.57E-02 | -5.94E-03 | -3.15E-04 | -1.12E-02 | -1.30E-04 |
| 743.2 | 1.47E-02 | 7.75E-03 | -1.63E-02 | -5.73E-03 | -4.16E-04 | -1.11E-02 | -3.91E-04 |
| 744.3 | 1.50E-02 | 7.92E-03 | -1.59E-02 | -5.32E-03 | -4.07E-04 | -1.11E-02 | -3.50E-04 |
| 745.4 | 1.49E-02 | 8.43E-03 | -1.56E-02 | -4.94E-03 | -4.93E-04 | -1.10E-02 | -8.07E-05 |
|       |          |          |           |           |           |           |           |
| 746.5 | 1.49E-02 | 8.12E-03 | -1.53E-02 | -4.84E-03 | -5.21E-04 | -1.07E-02 | 4.61E-04  |
| 747.6 | 1.50E-02 | 8.40E-03 | -1.53E-02 | -5.49E-03 | -7.39E-04 | -1.05E-02 | 4.28E-04  |
| 748.7 | 1.53E-02 | 8.44E-03 | -1.53E-02 | -6.15E-03 | -5.55E-04 | -1.05E-02 | 2.82E-04  |
| 749.8 | 1.63E-02 | 9.08E-03 | -1.49E-02 | -6.23E-03 | 1.11E-04  | -1.03E-02 | 5.51E-04  |
| 750.9 | 1.59E-02 | 8.72E-03 | -1.50E-02 | -5.90E-03 | 2.88E-04  | -1.05E-02 | 2.79E-04  |
| 752   | 1.59E-02 | 8.15E-03 | -1.51E-02 | -6.23E-03 | 1.62E-04  | -1.08E-02 | 1.68E-04  |
| 753.1 | 1.56E-02 | 7.72E-03 | -1.50E-02 | -5.99E-03 | -2.94E-04 | -1.10E-02 | -1.27E-04 |
|       |          |          | -1.45E-02 |           | -4.35E-04 |           | 5.84E-04  |
| 754.3 | 1.58E-02 | 7.76E-03 |           | -5.92E-03 |           | -1.02E-02 |           |
| 755.4 | 1.56E-02 | 7.69E-03 | -1.45E-02 | -5.35E-03 | -2.99E-04 | -9.86E-03 | 6.19E-04  |
| 756.5 | 1.53E-02 | 7.54E-03 | -1.50E-02 | -5.44E-03 | -4.61E-04 | -1.01E-02 | 6.38E-04  |
| 757.6 | 1.56E-02 | 7.47E-03 | -1.46E-02 | -5.28E-03 | -2.50E-04 | -1.05E-02 | 2.69E-04  |
| 758.7 | 1.59E-02 | 7.87E-03 | -1.42E-02 | -5.32E-03 | 3.51E-04  | -9.93E-03 | 5.15E-04  |
| 759.8 | 1.59E-02 | 8.26E-03 | -1.41E-02 | -5.84E-03 | 2.57E-04  | -1.00E-02 | 4.03E-04  |
| 760.9 | 1.62E-02 | 7.39E-03 | -1.49E-02 | -6.37E-03 | -1.74E-04 | -1.04E-02 | -1.06E-05 |
|       |          |          |           |           |           |           |           |
| 762   | 1.64E-02 | 7.24E-03 | -1.49E-02 | -6.17E-03 | -8.63E-04 | -1.06E-02 | 1.19E-04  |
| 763.1 | 1.66E-02 | 7.31E-03 | -1.43E-02 | -5.87E-03 | -5.31E-04 | -1.05E-02 | 2.05E-04  |
| 764.2 | 1.67E-02 | 8.16E-03 | -1.38E-02 | -5.21E-03 | -5.09E-05 | -9.76E-03 | 9.92E-04  |
| 765.3 | 1.69E-02 | 8.08E-03 | -1.34E-02 | -5.04E-03 | 1.24E-04  | -9.74E-03 | 6.87E-04  |
| 766.5 | 1.73E-02 | 8.50E-03 | -1.33E-02 | -4.56E-03 | 3.00E-04  | -9.89E-03 | 1.33E-03  |
| 767.6 | 1.67E-02 | 8.32E-03 | -1.35E-02 | -4.72E-03 | -6.40E-05 | -1.03E-02 | 1.24E-03  |
|       |          |          |           |           |           |           |           |
| 768.7 | 1.64E-02 | 7.88E-03 | -1.46E-02 | -5.10E-03 | -1.84E-04 | -1.09E-02 | 1.47E-03  |
| 769.8 | 1.62E-02 | 7.41E-03 | -1.50E-02 | -5.21E-03 | -6.61E-04 | -1.08E-02 | 1.24E-03  |
| 770.9 | 1.71E-02 | 7.41E-03 | -1.51E-02 | -4.95E-03 | -3.95E-04 | -1.08E-02 | 1.30E-03  |
| 772   | 1.80E-02 | 7.77E-03 | -1.45E-02 | -4.40E-03 | -2.81E-05 | -1.06E-02 | 1.64E-03  |
| 773.1 | 1.91E-02 | 7.52E-03 | -1.40E-02 | -4.29E-03 | 2.60E-04  | -1.00E-02 | 1.80E-03  |
| 774.2 | 1.88E-02 | 7.89E-03 | -1.40E-02 | -4.83E-03 | 2.91E-04  | -9.95E-03 | 2.03E-03  |
| 775.3 | 1.84E-02 | 7.94E-03 | -1.39E-02 | -5.39E-03 | -2.46E-04 | -9.60E-03 | 1.41E-03  |
| ,,,,, | 1.076-02 | ,.J+L-03 | 1.376-02  | J.JJL-0J  | 2.702-04  | J. 00L-03 | 1.711-03  |

| 776.4 | 1.68E-02 | 7.89E-03 | -1.41E-02 | -5.69E-03 | -4.73E-04 | -1.02E-02 | 9.12E-04 |
|-------|----------|----------|-----------|-----------|-----------|-----------|----------|
| 777.6 | 1.65E-02 | 7.76E-03 | -1.37E-02 | -5.10E-03 | -2.43E-04 | -1.02E-02 | 5.58E-04 |
| 778.7 | 1.64E-02 | 7.24E-03 | -1.39E-02 | -5.10E-03 | 2.84E-04  | -1.01E-02 | 8.09E-04 |
| 779.8 | 1.74E-02 | 6.67E-03 | -1.45E-02 | -5.43E-03 | 4.52E-04  | -1.05E-02 | 6.60E-04 |
|       |          |          |           |           |           |           |          |
| 780.9 | 1.75E-02 | 5.94E-03 | -1.53E-02 | -6.13E-03 | -2.44E-04 | -1.08E-02 | 6.54E-04 |
| 782   | 1.78E-02 | 6.70E-03 | -1.51E-02 | -5.51E-03 | -8.68E-04 | -1.13E-02 | 8.54E-04 |
| 783.1 | 1.79E-02 | 7.52E-03 | -1.54E-02 | -5.45E-03 | -1.05E-03 | -1.10E-02 | 1.17E-03 |
| 784.2 | 1.88E-02 | 8.26E-03 | -1.50E-02 | -4.84E-03 | -8.60E-04 | -1.07E-02 | 1.55E-03 |
|       |          |          |           |           |           |           |          |
| 785.3 | 1.86E-02 | 8.03E-03 | -1.50E-02 | -4.96E-03 | -2.78E-04 | -1.02E-02 | 1.03E-03 |
| 786.4 | 1.86E-02 | 7.58E-03 | -1.38E-02 | -4.35E-03 | -2.22E-04 | -1.00E-02 | 1.21E-03 |
| 787.5 | 1.84E-02 | 7.38E-03 | -1.33E-02 | -4.42E-03 | 1.98E-05  | -1.03E-02 | 7.65E-04 |
| 788.6 | 1.92E-02 | 7.37E-03 | -1.29E-02 | -4.36E-03 | -4.79E-05 | -1.02E-02 | 1.85E-03 |
| 789.8 |          | 7.30E-03 |           | -4.60E-03 |           | -1.04E-02 | 1.29E-03 |
|       | 1.86E-02 |          | -1.38E-02 |           | 3.18E-05  |           |          |
| 790.9 | 1.85E-02 | 7.57E-03 | -1.44E-02 | -4.72E-03 | -2.85E-04 | -1.02E-02 | 1.52E-03 |
| 792   | 1.83E-02 | 7.63E-03 | -1.46E-02 | -5.01E-03 | -9.28E-04 | -1.05E-02 | 7.40E-04 |
| 793.1 | 1.92E-02 | 7.90E-03 | -1.35E-02 | -4.58E-03 | -6.87E-04 | -1.02E-02 | 1.17E-03 |
| 794.2 | 1.91E-02 | 7.16E-03 | -1.34E-02 | -4.23E-03 | -7.43E-04 | -1.01E-02 | 7.12E-04 |
|       |          |          |           |           |           |           |          |
| 795.3 | 1.88E-02 | 6.83E-03 | -1.36E-02 | -4.10E-03 | -4.07E-04 | -1.02E-02 | 8.41E-04 |
| 796.4 | 1.83E-02 | 7.21E-03 | -1.39E-02 | -4.22E-03 | -8.31E-04 | -9.69E-03 | 9.09E-04 |
| 797.5 | 1.77E-02 | 7.69E-03 | -1.30E-02 | -3.64E-03 | -4.82E-04 | -9.09E-03 | 1.24E-03 |
| 798.6 | 1.79E-02 | 8.27E-03 | -1.25E-02 | -3.78E-03 | -8.06E-05 | -8.58E-03 | 1.20E-03 |
| 799.7 |          |          | -1.19E-02 |           |           | -8.70E-03 | 1.25E-03 |
|       | 1.78E-02 | 8.58E-03 |           | -3.90E-03 | -6.66E-05 |           |          |
| 800.8 | 1.86E-02 | 8.89E-03 | -1.21E-02 | -4.45E-03 | 1.42E-05  | -9.03E-03 | 1.43E-03 |
| 802   | 1.90E-02 | 8.86E-03 | -1.20E-02 | -4.17E-03 | -1.40E-05 | -9.46E-03 | 1.62E-03 |
| 803.1 | 2.00E-02 | 8.13E-03 | -1.28E-02 | -3.84E-03 | -1.62E-04 | -9.60E-03 | 1.73E-03 |
| 804.2 | 2.01E-02 | 7.91E-03 | -1.24E-02 | -3.23E-03 | -6.97E-04 | -9.31E-03 | 1.96E-03 |
|       |          |          |           |           |           |           |          |
| 805.3 | 2.01E-02 | 7.63E-03 | -1.26E-02 | -2.80E-03 | -7.19E-04 | -9.10E-03 | 2.66E-03 |
| 806.4 | 2.00E-02 | 8.32E-03 | -1.19E-02 | -2.33E-03 | -3.96E-04 | -8.60E-03 | 3.16E-03 |
| 807.5 | 2.04E-02 | 8.99E-03 | -1.15E-02 | -2.23E-03 | 1.39E-04  | -8.51E-03 | 3.38E-03 |
| 808.6 | 2.05E-02 | 9.26E-03 | -1.15E-02 | -2.65E-03 | -8.28E-06 | -8.50E-03 | 2.95E-03 |
|       |          |          |           |           |           |           |          |
| 809.7 | 2.03E-02 | 8.56E-03 | -1.22E-02 | -3.14E-03 | -4.45E-05 | -8.79E-03 | 2.60E-03 |
| 810.8 | 1.99E-02 | 7.80E-03 | -1.23E-02 | -3.57E-03 | -5.11E-04 | -8.85E-03 | 2.64E-03 |
| 811.9 | 1.99E-02 | 7.93E-03 | -1.21E-02 | -3.17E-03 | -9.17E-04 | -8.71E-03 | 2.75E-03 |
| 813.1 | 2.01E-02 | 8.12E-03 | -1.21E-02 | -2.85E-03 | -4.52E-04 | -8.66E-03 | 2.81E-03 |
| 814.2 | 2.04E-02 |          | -1.23E-02 | -2.08E-03 | -4.96E-05 | -8.55E-03 | 3.07E-03 |
|       |          | 8.61E-03 |           |           |           |           |          |
| 815.3 | 2.04E-02 | 8.30E-03 | -1.22E-02 | -2.14E-03 | 4.58E-04  | -8.57E-03 | 2.93E-03 |
| 816.4 | 2.08E-02 | 7.95E-03 | -1.22E-02 | -2.32E-03 | -3.32E-04 | -9.26E-03 | 2.88E-03 |
| 817.5 | 2.09E-02 | 7.29E-03 | -1.28E-02 | -2.94E-03 | -4.66E-04 | -9.90E-03 | 2.40E-03 |
| 818.6 | 2.16E-02 | 7.71E-03 | -1.25E-02 | -2.28E-03 | -4.63E-04 | -9.38E-03 | 2.93E-03 |
|       |          |          |           |           |           |           |          |
| 819.7 | 2.08E-02 | 7.90E-03 | -1.29E-02 | -3.06E-03 | -1.60E-04 | -8.92E-03 | 2.57E-03 |
| 820.8 | 2.02E-02 | 7.70E-03 | -1.38E-02 | -3.40E-03 | -3.75E-04 | -8.85E-03 | 2.19E-03 |
| 821.9 | 2.01E-02 | 7.68E-03 | -1.39E-02 | -3.23E-03 | -4.74E-04 | -8.81E-03 | 2.43E-03 |
| 823   | 2.07E-02 | 7.98E-03 | -1.36E-02 | -2.70E-03 | -3.39E-04 | -8.72E-03 | 2.63E-03 |
| 824.1 |          | 8.50E-03 |           |           |           |           |          |
|       | 2.13E-02 |          | -1.32E-02 | -2.85E-03 | -7.50E-05 | -8.48E-03 | 3.61E-03 |
| 825.3 | 2.15E-02 | 8.26E-03 | -1.34E-02 | -3.32E-03 | 4.40E-04  | -8.62E-03 | 3.39E-03 |
| 826.4 | 2.20E-02 | 8.61E-03 | -1.26E-02 | -2.76E-03 | 3.71E-04  | -8.23E-03 | 4.08E-03 |
| 827.5 | 2.18E-02 | 8.61E-03 | -1.23E-02 | -2.32E-03 | 6.23E-04  | -8.63E-03 | 3.16E-03 |
| 828.6 | 2.19E-02 | 8.91E-03 | -1.27E-02 | -2.48E-03 | 2.61E-04  | -8.86E-03 | 3.11E-03 |
|       |          |          |           |           |           |           |          |
| 829.7 | 2.18E-02 | 9.06E-03 | -1.36E-02 | -2.96E-03 | 1.81E-04  | -8.67E-03 | 2.64E-03 |
| 830.8 | 2.27E-02 | 9.58E-03 | -1.36E-02 | -2.37E-03 | 2.49E-04  | -7.86E-03 | 3.40E-03 |
| 831.9 | 2.25E-02 | 9.13E-03 | -1.37E-02 | -2.53E-03 | -1.67E-04 | -8.18E-03 | 3.61E-03 |
| 833   | 2.21E-02 | 8.81E-03 | -1.28E-02 | -2.14E-03 | 2.96E-04  | -8.40E-03 | 3.68E-03 |
| 834   | 2.16E-02 | 7.86E-03 | -1.29E-02 | -3.05E-03 | -1.73E-05 | -8.83E-03 | 3.58E-03 |
|       |          |          |           |           |           |           |          |
| 835.1 | 2.16E-02 | 8.18E-03 | -1.30E-02 | -2.56E-03 | -1.72E-04 | -8.37E-03 | 3.26E-03 |
| 836.1 | 2.17E-02 | 8.65E-03 | -1.28E-02 | -2.57E-03 | -4.89E-05 | -8.37E-03 | 4.12E-03 |
| 837.2 | 2.07E-02 | 8.40E-03 | -1.35E-02 | -3.15E-03 | -4.92E-04 | -8.37E-03 | 3.70E-03 |
| 838.2 | 2.13E-02 | 8.40E-03 | -1.35E-02 | -3.46E-03 | -3.84E-04 | -8.59E-03 | 4.41E-03 |
|       |          |          |           |           |           |           |          |
| 839.3 | 2.11E-02 | 7.79E-03 | -1.42E-02 | -4.45E-03 | -7.30E-04 | -8.71E-03 | 4.18E-03 |
| 840.3 | 2.20E-02 | 8.81E-03 | -1.30E-02 | -3.90E-03 | -9.63E-05 | -7.98E-03 | 5.17E-03 |
| 841.4 | 2.10E-02 | 8.43E-03 | -1.34E-02 | -4.38E-03 | -2.25E-04 | -8.30E-03 | 4.43E-03 |
| 842.4 | 2.09E-02 | 8.98E-03 | -1.31E-02 | -3.61E-03 | -3.37E-05 | -8.40E-03 | 4.43E-03 |
| 843.5 | 2.09E-02 | 8.54E-03 | -1.33E-02 | -3.21E-03 | 5.09E-05  | -8.83E-03 | 4.24E-03 |
|       |          |          |           |           |           |           |          |
| 844.5 | 2.13E-02 | 8.70E-03 | -1.32E-02 | -3.00E-03 | -9.38E-05 | -9.16E-03 | 4.52E-03 |
| 845.6 | 2.13E-02 | 8.51E-03 | -1.31E-02 | -2.35E-03 | -9.35E-04 | -8.96E-03 | 4.60E-03 |
| 846.6 | 2.11E-02 | 8.27E-03 | -1.27E-02 | -2.44E-03 | -1.69E-03 | -9.13E-03 | 4.34E-03 |
| 847.7 | 2.04E-02 | 7.93E-03 | -1.23E-02 | -2.84E-03 | -1.75E-03 | -8.36E-03 | 4.30E-03 |
| 848.7 | 2.10E-02 | 7.60E-03 | -1.25E-02 | -3.07E-03 | -8.82E-04 | -8.13E-03 | 4.58E-03 |
|       |          |          |           |           |           |           |          |
| 849.8 | 2.14E-02 | 8.31E-03 | -1.25E-02 | -2.81E-03 | 4.83E-05  | -7.42E-03 | 5.58E-03 |
| 850.8 | 2.21E-02 | 8.48E-03 | -1.27E-02 | -2.46E-03 | 1.09E-03  | -7.27E-03 | 5.61E-03 |
| 851.9 | 2.21E-02 | 8.61E-03 | -1.27E-02 | -3.18E-03 | 3.53E-04  | -7.08E-03 | 5.38E-03 |
| 852.9 | 2.20E-02 | 8.09E-03 | -1.27E-02 | -3.95E-03 | -4.81E-05 | -7.84E-03 | 5.01E-03 |
|       |          |          |           |           |           |           |          |
| 854   | 2.24E-02 | 8.27E-03 | -1.29E-02 | -3.90E-03 | -1.24E-04 | -7.84E-03 | 5.03E-03 |
|       |          |          |           |           |           |           |          |

| 855   | 2.26E-02 | 8.73E-03 | -1.19E-02 | -3.47E-03 | 1.01E-03  | -7.72E-03 | 5.76E-03 |
|-------|----------|----------|-----------|-----------|-----------|-----------|----------|
| 856.1 | 2.27E-02 | 9.48E-03 | -1.17E-02 | -2.80E-03 | 5.35E-04  | -7.35E-03 | 6.12E-03 |
| 857.1 | 2.27E-02 | 9.04E-03 | -1.11E-02 | -3.01E-03 | 3.10E-04  | -7.34E-03 | 6.25E-03 |
| 858.2 | 2.26E-02 | 8.76E-03 | -1.23E-02 | -2.70E-03 | -1.04E-03 | -6.83E-03 | 6.03E-03 |
| 859.2 | 2.29E-02 | 8.45E-03 | -1.23E-02 | -2.44E-03 | -3.97E-04 | -6.56E-03 | 5.87E-03 |
|       |          |          |           |           |           |           |          |
| 860.3 | 2.23E-02 | 8.56E-03 | -1.28E-02 | -2.36E-03 | -8.58E-04 | -6.86E-03 | 5.82E-03 |
| 861.4 | 2.22E-02 | 8.40E-03 | -1.24E-02 | -2.24E-03 | 2.90E-05  | -7.06E-03 | 5.97E-03 |
| 862.4 | 2.25E-02 | 8.57E-03 | -1.22E-02 | -2.48E-03 | 1.18E-04  | -6.51E-03 | 5.86E-03 |
| 863.5 | 2.34E-02 | 9.15E-03 | -1.22E-02 | -1.75E-03 | 7.55E-04  | -5.87E-03 | 6.75E-03 |
| 864.5 | 2.35E-02 | 8.99E-03 | -1.16E-02 | -2.32E-03 | 3.60E-04  | -5.78E-03 | 6.32E-03 |
| 865.6 | 2.30E-02 | 8.69E-03 | -1.13E-02 | -2.35E-03 | 1.62E-04  | -6.18E-03 | 6.76E-03 |
| 866.6 | 2.24E-02 | 8.68E-03 | -1.05E-02 | -2.86E-03 | -6.18E-04 | -6.34E-03 | 6.57E-03 |
|       |          |          |           |           |           |           |          |
| 867.7 | 2.21E-02 | 9.00E-03 | -1.16E-02 | -3.12E-03 | -7.19E-04 | -6.84E-03 | 6.91E-03 |
| 868.7 | 2.31E-02 | 8.97E-03 | -1.13E-02 | -3.58E-03 | -1.07E-04 | -6.64E-03 | 6.69E-03 |
| 869.8 | 2.30E-02 | 9.44E-03 | -1.09E-02 | -3.96E-03 | 2.41E-04  | -6.75E-03 | 6.89E-03 |
| 870.8 | 2.38E-02 | 9.15E-03 | -1.10E-02 | -3.84E-03 | 5.16E-04  | -6.62E-03 | 7.20E-03 |
| 871.9 | 2.28E-02 | 8.73E-03 | -1.12E-02 | -3.80E-03 | -3.83E-04 | -6.58E-03 | 7.31E-03 |
| 872.9 | 2.32E-02 | 8.36E-03 | -1.12E-02 | -4.50E-03 | 1.73E-04  | -6.16E-03 | 7.58E-03 |
| 874   | 2.43E-02 | 8.96E-03 | -9.27E-03 | -3.82E-03 | 8.48E-04  | -5.10E-03 | 7.99E-03 |
|       |          |          |           |           |           |           |          |
| 875   | 2.45E-02 | 8.95E-03 | -9.26E-03 | -3.58E-03 | 1.05E-03  | -5.62E-03 | 7.82E-03 |
| 876.1 | 2.41E-02 | 7.92E-03 | -9.13E-03 | -2.91E-03 | 3.54E-04  | -5.56E-03 | 7.49E-03 |
| 877.1 | 2.32E-02 | 7.69E-03 | -9.94E-03 | -3.94E-03 | -2.97E-04 | -6.08E-03 | 7.24E-03 |
| 878.2 | 2.34E-02 | 8.49E-03 | -9.61E-03 | -3.96E-03 | -3.65E-04 | -5.40E-03 | 7.39E-03 |
| 879.2 | 2.36E-02 | 9.13E-03 | -9.16E-03 | -3.89E-03 | -9.53E-04 | -5.20E-03 | 7.53E-03 |
| 880.3 | 2.34E-02 | 9.29E-03 | -9.21E-03 | -3.33E-03 | -1.02E-03 | -4.82E-03 | 7.23E-03 |
| 881.3 | 2.39E-02 | 9.47E-03 | -7.70E-03 | -2.75E-03 | -2.69E-04 | -3.79E-03 | 7.93E-03 |
|       |          |          |           |           |           |           |          |
| 882.4 | 2.52E-02 | 1.01E-02 | -6.49E-03 | -2.01E-03 | 6.71E-04  | -2.94E-03 | 8.16E-03 |
| 883.4 | 2.43E-02 | 9.56E-03 | -5.58E-03 | -2.19E-03 | 1.09E-03  | -3.74E-03 | 7.97E-03 |
| 884.5 | 2.54E-02 | 9.20E-03 | -5.78E-03 | -2.73E-03 | 7.92E-04  | -3.80E-03 | 7.82E-03 |
| 885.5 | 2.47E-02 | 9.17E-03 | -6.60E-03 | -3.20E-03 | 5.59E-04  | -4.04E-03 | 7.04E-03 |
| 886.6 | 2.64E-02 | 1.01E-02 | -5.04E-03 | -3.31E-03 | 8.05E-04  | -1.95E-03 | 7.85E-03 |
| 887.6 | 2.49E-02 | 9.62E-03 | -6.75E-03 | -4.20E-03 | -2.51E-05 | -3.07E-03 | 7.11E-03 |
| 888.7 | 2.46E-02 | 9.48E-03 | -5.63E-03 | -4.45E-03 | 8.10E-04  | -2.54E-03 | 8.15E-03 |
| 889.7 | 2.47E-02 | 9.52E-03 |           | -4.60E-03 |           | -2.29E-03 | 8.24E-03 |
|       |          |          | -6.04E-03 |           | 1.10E-04  |           |          |
| 890.8 | 2.49E-02 | 1.02E-02 | -4.44E-03 | -4.71E-03 | 1.97E-04  | -1.66E-03 | 8.20E-03 |
| 891.9 | 2.56E-02 | 1.04E-02 | -3.16E-03 | -4.58E-03 | -8.09E-05 | -6.93E-04 | 8.50E-03 |
| 892.9 | 2.51E-02 | 9.70E-03 | -3.61E-03 | -4.87E-03 | 2.59E-04  | -1.82E-03 | 8.02E-03 |
| 894   | 2.52E-02 | 9.96E-03 | -2.95E-03 | -4.23E-03 | 7.11E-04  | -8.28E-05 | 8.29E-03 |
| 895   | 2.53E-02 | 1.00E-02 | -3.70E-03 | -4.84E-03 | -3.78E-04 | -7.86E-04 | 7.51E-03 |
| 896.1 | 2.49E-02 | 1.13E-02 | -2.81E-03 | -4.29E-03 | -6.29E-04 | -2.66E-04 | 7.48E-03 |
| 897.1 | 2.45E-02 | 1.16E-02 | -1.48E-03 | -4.09E-03 | -8.60E-04 | -3.78E-04 | 8.12E-03 |
|       | 2.40E-02 |          |           |           |           |           |          |
| 898.2 |          | 1.14E-02 | -2.22E-03 | -3.79E-03 | -7.03E-04 | -1.28E-04 | 8.79E-03 |
| 899.2 | 2.40E-02 | 1.19E-02 | -9.98E-04 | -3.05E-03 | -1.11E-03 | 1.27E-03  | 9.93E-03 |
| 900.3 | 2.48E-02 | 1.18E-02 | -4.36E-04 | -2.50E-03 | -5.06E-04 | 1.80E-03  | 1.06E-02 |
| 901.3 | 2.44E-02 | 1.21E-02 | 1.40E-03  | -1.89E-03 | -2.20E-05 | 2.53E-03  | 1.05E-02 |
| 902.4 | 2.43E-02 | 1.22E-02 | 2.25E-03  | -1.54E-03 | 3.08E-04  | 2.65E-03  | 1.07E-02 |
| 903.4 | 2.39E-02 | 1.26E-02 | 2.24E-03  | -1.37E-03 | -9.92E-05 | 3.28E-03  | 1.10E-02 |
| 904.5 | 2.32E-02 | 1.39E-02 | 4.34E-03  | 2.91E-04  | 7.28E-04  | 4.94E-03  | 1.25E-02 |
| 905.5 | 2.29E-02 | 1.37E-02 | 4.91E-03  | 1.58E-03  | 1.24E-03  | 5.84E-03  | 1.30E-02 |
|       |          |          |           |           |           |           |          |
| 906.6 | 2.19E-02 | 1.39E-02 | 5.62E-03  | 2.77E-03  | 1.70E-03  | 6.08E-03  | 1.29E-02 |
| 907.6 | 2.13E-02 | 1.47E-02 | 6.32E-03  | 3.03E-03  | 3.51E-04  | 6.30E-03  | 1.31E-02 |
| 908.7 | 2.09E-02 | 1.44E-02 | 6.51E-03  | 2.44E-03  | 4.83E-04  | 6.71E-03  | 1.29E-02 |
| 909.7 | 2.03E-02 | 1.51E-02 | 7.94E-03  | 2.66E-03  | -2.64E-04 | 7.53E-03  | 1.35E-02 |
| 910.8 | 1.99E-02 | 1.42E-02 | 7.92E-03  | 3.26E-03  | 9.56E-05  | 8.04E-03  | 1.42E-02 |
| 911.8 | 1.85E-02 | 1.38E-02 | 7.50E-03  | 4.52E-03  | -1.18E-03 | 7.24E-03  | 1.42E-02 |
| 912.9 | 1.73E-02 | 1.51E-02 | 8.68E-03  | 6.41E-03  | -1.09E-03 | 7.69E-03  | 1.45E-02 |
| 913.9 | 1.65E-02 |          |           |           |           | 7.38E-03  | 1.39E-02 |
|       |          | 1.48E-02 | 8.52E-03  | 7.21E-03  | -1.16E-05 |           |          |
| 915   | 1.64E-02 | 1.65E-02 | 1.09E-02  | 8.34E-03  | 1.52E-03  | 8.99E-03  | 1.43E-02 |
| 916   | 1.60E-02 | 1.57E-02 | 1.07E-02  | 8.53E-03  | 1.58E-03  | 9.27E-03  | 1.53E-02 |
| 917.1 | 1.43E-02 | 1.53E-02 | 1.08E-02  | 8.65E-03  | 5.27E-04  | 9.40E-03  | 1.54E-02 |
| 918.1 | 1.26E-02 | 1.49E-02 | 1.06E-02  | 9.46E-03  | -1.93E-04 | 9.26E-03  | 1.52E-02 |
| 919.2 | 1.19E-02 | 1.45E-02 | 1.09E-02  | 9.45E-03  | 9.26E-04  | 9.27E-03  | 1.47E-02 |
| 920.3 | 1.12E-02 | 1.55E-02 | 1.20E-02  | 1.11E-02  | 1.71E-03  | 9.91E-03  | 1.48E-02 |
| 921.3 | 1.01E-02 | 1.55E-02 | 1.28E-02  | 1.12E-02  | 1.65E-03  | 1.02E-02  | 1.58E-02 |
|       |          |          |           |           |           |           |          |
| 922.4 | 8.92E-03 | 1.46E-02 | 1.31E-02  | 1.14E-02  | 4.36E-04  | 9.96E-03  | 1.51E-02 |
| 923.4 | 8.43E-03 | 1.47E-02 | 1.43E-02  | 1.17E-02  | 4.59E-04  | 1.07E-02  | 1.53E-02 |
| 924.5 | 7.55E-03 | 1.39E-02 | 1.36E-02  | 1.17E-02  | 5.05E-04  | 1.07E-02  | 1.49E-02 |
| 925.5 | 6.60E-03 | 1.38E-02 | 1.31E-02  | 1.30E-02  | 7.26E-04  | 1.02E-02  | 1.54E-02 |
| 926.6 | 5.24E-03 | 1.31E-02 | 1.22E-02  | 1.24E-02  | 5.41E-05  | 9.19E-03  | 1.50E-02 |
| 927.6 | 4.89E-03 | 1.21E-02 | 1.20E-02  | 1.22E-02  | -5.29E-04 | 9.19E-03  | 1.41E-02 |
| 928.7 | 4.12E-03 | 1.17E-02 | 1.21E-02  | 1.09E-02  | -7.85E-04 | 8.66E-03  | 1.35E-02 |
| 220.7 |          |          | 1.18E-02  | 1.00E-02  | -9.74E-04 | 8.05E-03  | 1.31E-02 |
| 929.7 | 4.12E-03 | 1.10E-02 |           |           |           |           |          |

## Acid Spectroscopy Curves

| 930.8 | 3.07E-03  | 1.07E-02  | 1.09E-02  | 9.77E-03  | -4.64E-04 | 7.17E-03 | 1.25E-02 |
|-------|-----------|-----------|-----------|-----------|-----------|----------|----------|
| 931.8 | 3.15E-03  | 9.78E-03  | 1.08E-02  | 9.49E-03  | -3.29E-04 | 7.09E-03 | 1.20E-02 |
| 932.9 | 2.43E-03  | 9.55E-03  | 1.03E-02  | 9.52E-03  | 3.01E-05  | 7.00E-03 | 1.13E-02 |
| 933.9 | 2.21E-03  | 8.61E-03  | 9.88E-03  | 8.43E-03  | -1.78E-04 | 7.19E-03 | 1.19E-02 |
| 935   | 7.34E-04  | 8.34E-03  | 8.55E-03  | 8.43E-03  | -9.69E-05 | 6.80E-03 | 1.18E-02 |
| 936   | -2.54E-04 | 6.68E-03  | 7.63E-03  | 7.32E-03  | -2.11E-04 | 6.64E-03 | 1.16E-02 |
| 937.1 | 3.73E-05  | 6.26E-03  | 7.54E-03  | 7.49E-03  | 6.40E-04  | 5.96E-03 | 1.09E-02 |
| 938.1 | 6.33E-06  | 5.60E-03  | 7.18E-03  | 6.45E-03  | 8.37E-04  | 6.37E-03 | 1.10E-02 |
| 939.2 | -3.02E-04 | 5.87E-03  | 6.62E-03  | 5.86E-03  | 1.25E-03  | 6.08E-03 | 1.08E-02 |
| 940.3 | -2.12E-03 | 4.36E-03  | 4.77E-03  | 3.95E-03  | 8.71E-04  | 5.70E-03 | 9.86E-03 |
| 941.3 | -3.15E-03 | 2.96E-03  | 3.99E-03  | 2.70E-03  | 5.85E-04  | 5.14E-03 | 9.55E-03 |
| 942.4 | -4.33E-03 | 1.06E-03  | 3.20E-03  | 2.20E-03  | 4.77E-04  | 5.11E-03 | 8.98E-03 |
| 943.4 | -4.67E-03 | 5.98E-04  | 2.18E-03  | 1.74E-03  | 1.51E-05  | 4.62E-03 | 8.54E-03 |
| 944.5 | -5.07E-03 | 5.54E-04  | 1.77E-03  | 1.68E-03  | 9.51E-04  | 3.82E-03 | 7.60E-03 |
| 945.5 | -4.21E-03 | 5.39E-05  | 1.17E-03  | 8.76E-04  | 1.47E-03  | 3.07E-03 | 6.95E-03 |
| 946.6 | -3.36E-03 | 8.42E-04  | 1.68E-03  | 9.39E-04  | 2.43E-03  | 3.27E-03 | 7.08E-03 |
| 947.6 | -3.97E-03 | -9.69E-04 | 7.94E-04  | 2.43E-04  | 1.32E-03  | 3.73E-03 | 5.72E-03 |
| 948.7 | -4.35E-03 | -9.04E-04 | -2.48E-04 | -6.16E-04 | 1.24E-03  | 3.23E-03 | 5.62E-03 |
| 949.7 | -5.78E-03 | -2.75E-03 | -6.03E-04 | -1.11E-03 | 5.12E-04  | 2.72E-03 | 4.79E-03 |